

AD-A246 494

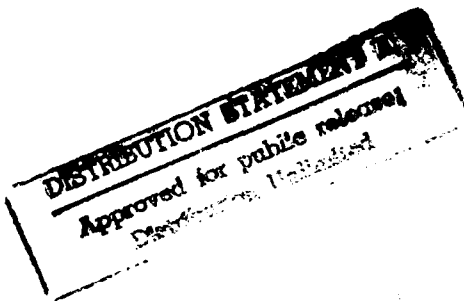


CRM 91-64 / July 1991

2

Reenlisting in the Marine Corps: The Impact of Bonuses, Grade, and Dependency Status

Aline O. Quester
Adebayo M. Adedeji



CNA

CENTER FOR NAVAL ANALYSES

4401 Ford Avenue • Post Office Box 16268 • Alexandria, Virginia 22302-0268

92-04774



02 2 25 012

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.

Work conducted under contract N00014-91-C-0002.

This Research Memorandum represents the best opinion of CNA at the time of issue.
It does not necessarily represent the opinion of the Department of the Navy.

REPORT DOCUMENTATION PAGE

Form Approved
OPM No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources gathering and maintaining the data needed, and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

| | | | | |
|---|--|---|---|--|
| 1. AGENCY USE ONLY (Leave Blank) | | 2. REPORT DATE July 1991 | 3. REPORT TYPE AND DATES COVERED Final | |
| 4. TITLE AND SUBTITLE Reenlisting in the Marine Corps: The Impact of Bonuses, Grade, and Dependency Status | | | 5. FUNDING NUMBERS C - N00014-91-C-0002 PE - 65153M PR - C0031 | |
| 6. AUTHOR(S) Aline O. Quester, Adebayo M. Adedeji | | | | |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Center for Naval Analyses 4401 Ford Avenue Alexandria, Virginia 22302-0268 | | | 8. PERFORMING ORGANIZATION REPORT NUMBER CRM 91-64 | |
| 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Commanding General Marine Corps Combat Development Command (WF 13F) Studies and Analyses Branch Quantico, Virginia 22134 | | | 10. SPONSORING/MONITORING AGENCY REPORT NUMBER | |
| 11. SUPPLEMENTARY NOTES | | | | |
| 12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for Public Release; Distribution Unlimited | | | 12b. DISTRIBUTION CODE | |
| 13. ABSTRACT (Maximum 200 words) First-term reenlistment decisions for recommended and eligible Marine in FY 1980 through FY 1990 are analyzed in this research memorandum. Particular attention is given to the retention effects of selective reenlistment bonuses on Marines in different Armed Force Qualification Test (AFQT) score categories. Additionally, reenlistment behavior for Marines of different marital statuses, grades, and length of initial enlistment contracts are analyzed. | | | | |
| 14. SUBJECT TERMS Demography, Enlisted personnel, Family members, Logit model, Marine Corps personnel, Mental ability, Personnel retention, Probability, Rank, Reenlistment, Statistical analysis, Statistical data, SRB (selective reenlistment bonus) | | | 15. NUMBER OF PAGES 117 | |
| | | | 16. PRICE CODE | |
| 17. SECURITY CLASSIFICATION OF REPORT CPR | 18. SECURITY CLASSIFICATION OF THIS PAGE CPR | 19. SECURITY CLASSIFICATION OF ABSTRACT CPR | 20. LIMITATION OF ABSTRACT SAR | |

NSN 7540-01-280-5500

Standard Form 298, (Rev. 2-89)
Prescribed by ANSI Std. Z39-18
299-01

CNA**CENTER FOR NAVAL ANALYSES**

4401 Ford Avenue • Post Office Box 16268 • Alexandria, Virginia 22302-0268 • (703) 824-2000

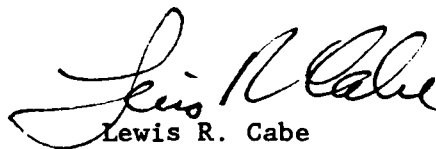
15 August 1991

MEMORANDUM FOR DISTRIBUTION LIST

Subj: Center for Naval Analyses Research Memorandum 91-64

Encl: (1) CNA Research Memorandum 91-64, *Reenlisting in the Marine Corps: The Impact of Bonuses, Grade, and Dependency Status*, by Aline O. Quester and Adebayo M. Adedeji, Jul 1991

1. Enclosure (1) is forwarded as a matter of possible interest.
2. First-term reenlistment decisions for recommended and eligible Marines in FY 1980 through FY 1990 are analyzed in this research memorandum. Particular attention is given to the retention effects of selective reenlistment bonuses on Marines in different Armed Forces Qualification Test (AFQT) score categories. Additionally, reenlistment behavior for Marines of different marital statuses, grades, and length of initial enlistment contracts are analyzed.

Lewis R. Cabe
Director
Manpower and Training ProgramDistribution List:
Reverse page

| Accession For | |
|--------------------|--|
| NTIS GRA&I | <input checked="checked" type="checkbox"/> |
| DTIC TAB | <input type="checkbox"/> |
| Unannounced | <input type="checkbox"/> |
| Justification | |
| By _____ | |
| Distribution/ | |
| Availability Codes | |
| Dist | Avail and/or Special |
| A-1 | |

Subj: Center for Naval Analyses Research Memorandum 91-64

Distribution List

SNDL

24J1 CG FMFLANT
24J2 CG FMFPAC
45A2 CG I MEF
45A2 CG II MEF
45A2 CG III MEF
45B CG FIRST MARDIV
45B CG FOURTH MARDIV
45B CG SECOND MARDIV
45B CG THIRD MARDIV
45Q CG FIRST FSSG
45Q CG FOURTH FSSG
45Q CG SECOND FSSG
45Q CG THIRD FSSG
46B CG FIRST MAW
46B CG FOURTH MAW
46B CG SECOND MAW
46B CG THIRD MAW
A1 DASN - MANPOWER (2 copies)
A1H ASSTSECNAV MRA
A5 PERS-2 - Military Personnel Policy Div.
A6 DNIGMC/IGME
A6 HQMC AVN
 Attn: Manpower
A6 HQMC MPR & RA
 Attn: DC/S for Manpower (2 copies)
 Attn: Dir, Personnel Procurement Division (2 copies)
 Attn: Dir, Manpower Plans and Policy Division (4 copies)
 Attn: Dir, Personnel Management Division
 Attn: Manpower & Evaluation Branch (2 copies)
A6 HQMC OLA
A6 HQMC PA
A6 HQMC R&P (2 copies)
FF38 USNA
 Attn: Nimitz Library
FF42 NAVPGSCOL
 Attn: Code 64
 Attn: Library (2 copies)
FJA13 NAVPERSRANDCEN
 Attn: Technical Director (Code 01)
 Attn: Technical Library
 Attn: Director, Manpower Systems (Code 11)
 Attn: Director, Personnel Systems (Code 12)
 Attn: Information Support (Code 113)
V12 CG MAGTEC
V12 CG MCCDC

OPNAV
OP-01

Reenlisting in the Marine Corps: The Impact of Bonuses, Grade, and Dependency Status

Aline O. Quester
Adebayo M. Adedeji

Operations and Support Division



CENTER FOR NAVAL ANALYSES

4401 Ford Avenue • Post Office Box 16268 • Alexandria, Virginia 22302-0268

ABSTRACT

First-term reenlistment decisions for recommended and eligible Marines in FY 1980 through FY 1990 are analyzed in this research memorandum. Particular attention is given to the retention effects of selective reenlistment bonuses on Marines in different Armed Forces Qualification Test (AFQT) score categories. Additionally, reenlistment behavior for Marines of different marital statuses, grades, and length of initial enlistment contracts are analyzed.

EXECUTIVE SUMMARY

In the recent past, there have been substantial changes in the characteristics of enlisted Marines, as well as changes in Marine Corps personnel policy. First, enlisted Marines today are both smarter and better educated than they were in the earlier years of the 1980s. Second, although the percentage of recruits who enter the Marine Corps married or with dependents has remained virtually unchanged over time, the Marine Corps has experienced substantial increases in the marriage and dependency rate for enlisted personnel. Third, first-term enlistment contracts have been lengthened so that Marines now average more years of service at the first reenlistment point. Finally, there has been an increase in both time in service (TIS) and time in grade (TIG) for promotions to corporal (Cpl) and sergeant (Sgt). The impact of these changes on reenlistment decisions of first-term enlisted personnel (zone A decisions) is the subject of this research memorandum.

The main analysis focused on zone A reenlistment decisions of a random sample of almost 27,000 Marines in the FY 1980 through FY 1990 period. Reenlistment probability was estimated as a function of the selected-reenlistment-bonus (SRB) multiple, grade, background characteristics, length of the initial contract, whether or not an extension was executed immediately before the decision, military occupational specialty (MOS) group, a civilian-to-military pay index, and the civilian unemployment rate.

Table I details the characteristics of the sample as well as the average reenlistment rate of Marines with the different characteristics. A close examination of the average differences in reenlistment rates is warranted, as the multivariate statistical analysis substantiates the findings in table I.

SRBs exert a strong and regular impact on the decision to reenlist. Over the period, 55.5 of the reenlistment decisions were made by Marines in MOSs not offered an SRB; the reenlistment rate for these Marines was 24.6 percent. In contrast, the reenlistment rate for Marines in MOSs offered level-one SRBs¹ was 34.5 percent. For each increase in the bonus award level, table I shows an increase of about 6 percentage points in the reenlistment rate. Moreover, detailed analysis in the main text shows that the strongest impact of SRBs is for Marines with the highest scores on the AFQT. In brief, SRBs increase both the quantity and the quality of Marine Corps reenlistments.

1. The bonus dollars a Marine will receive is the SRB level multiplied by the Marine's monthly base pay multiplied by the number of years for which the Marine reenlists.

Table I. Reenlistment rate, by characteristics of recommended and eligible Marines making Zone A reenlistment decisions, FY 1980 through FY 1990

| Characteristic | Percent of sample | Reenlistment rate (%) |
|---|-------------------|-----------------------|
| Overall average | | 32.4 |
| SRB level offered | | |
| None | 55.5 | 24.6 |
| Level one | 9.8 | 34.5 |
| Level two | 16.7 | 39.1 |
| Level three | 8.0 | 45.7 |
| Level four | 6.9 | 50.6 |
| Level five | 2.3 | 53.5 |
| Level six | .8 | 59.6 |
| Grade | | |
| E3 | 23.0 | 21.2 |
| E4 | 58.8 | 33.5 |
| E5/E6 | 18.2 | 44.5 |
| Marital/dependency status | | |
| Not married, no dependents | 64.6 | 24.8 |
| Not married, dependents | 2.6 | 48.4 |
| Married | 35.4 | 44.6 |
| Either married or with dependents | 38.0 | 44.9 |
| Two or more dependents | 13.0 | 49.0 |
| Other individual background characteristics | | |
| Male | 95.2 | 31.6 |
| Female | 4.8 | 49.0 |
| Black | 18.0 | 50.2 |
| Hispanic | 5.7 | 31.2 |
| Not black or Hispanic | 76.3 | 28.3 |
| HSDG (Tier I) | 84.5 | 31.1 |
| AFQT I-II ^a | 22.7 | 30.5 |
| AFQT I-III ^a | 37.9 | 31.2 |
| Length of prior contract | | |
| Three years | 21.3 | 29.2 |
| Four years | 77.6 | 33.2 |
| Five or six years | 1.1 | 39.1 |

a. If missing AFQT scores are omitted, 32.0 percent of the sample are AFQT category I-II and 53.4 percent are AFQT category I-III^a. The AFQT scores of recommended and eligible personnel have increased significantly over the decade. In FY 1990, 36.1 percent of Zone A recommended and eligible Marines were AFQT category I-II and 60.5 percent were AFQT category I-III^a.

The relationship between AFQT score categories at accession and after the first reenlistment is a subject of considerable interest. The 1980s saw substantial increases in the proportion of Marine Corps accessions with high AFQT scores. These Marines with high AFQT scores have lower first-term attrition and are thus more likely to be in the population of recommended and eligible Marines making reenlistment decisions. While table I shows a slightly lower than average reenlistment rate among AFQT category I-II Marines (30.5 versus 32.4) for the sample of reenlistment decisions in the 1980s, the reenlistment rates in FY 1989 and FY 1990 of these category I-II Marines were higher than average. The last big increase in accession quality was in FY 1986, and it is these Marines who are now making reenlistment decisions. It appears that the Marine Corps investments in improving accession quality are paying off in higher retention, as well as in better performance and lower first-term attrition.

Marines who make their first reenlistment decision at a higher grade are more likely to reenlist. Over the decade, however, as promotion rates slowed, there were some changes in the reenlistment rates by grade. The largest changes were in the lance corporal reenlistment rate, which increased sharply. Presumably making the reenlistment decision at the grade of lance corporal at the end of the decade had a more positive connotation about a successful first term of service than it had at the beginning of the decade.

Reenlistment rates of Marines are sharply delineated by marital/dependency status; Marines who are married (or have dependents) at this decision point are considerably more likely to reenlist than those that are single. The average reenlistment rate for unmarried Marines was 24.8 percent, while the average rate for Marines who were married or who had dependents was almost 45 percent. Although the authors are not aware of any previous analysis of Marine Corps retention that explicitly examined marital or dependency status, these findings are consistent with findings for the other services.

The estimating equations fit the data extremely well, and coefficient estimates achieved high levels of statistical significance. Overall, the results suggest that higher SRBs, higher grade, longer initial enlistments, females, blacks, and married individuals are more likely to reenlist. Finally, the impact of SRBs is strongest for Marines who test in categories I and II of the Armed Forces Qualification Test (AFQT).

While the Marine Corps has used its SRB budget to channel reenlistments to required personnel, it has considerably less ability to manipulate the relationship of military to civilian pay or the civilian unemployment rate. Yet, both of these factors have played important roles in the reenlistment equation, particularly in the early 1980s. A 1-percentage point increase in the CNA-constructed military-to-civilian pay index for first-term personnel was associated with a 0.6-percentage point increase in the reenlistment rate. Similarly, a 1-percentage point increase in the 20- to 24-year-old male unemployment rate (a

fairly small historical change) was associated with a 0.6-percentage point increase in the Marine Corps reenlistment rate.

Further analysis focused on the timing of the reenlistment. FY 1989 decisions were partitioned into those made before the fiscal year of contract expiration (out-year reenlistments) and those made in-year. The basic findings are that Marines with longer initial contracts and high AFQT scores are more likely to be out-year reenlisters than in-year reenlisters. Higher SRB levels induce out-year reenlistments. Additionally, proportionally fewer of the reenlistments for black Marines are out-year than for the other racial/ethnic groups. For other characteristics, in FY 1989 at least, Marines appear to reenlist in roughly the same mix of in-year and early reenlistments as is average for the Corps.

Finally, during the course of the study, a permanent longitudinal decision database was constructed, and computer programs to update these files were finalized. Thus, future retention analyses can extract decisions and the background information on Marines making these decisions in a time frame that lags real-time decisions by only about three months.

CONTENTS

| | Page |
|---|------------|
| Illustrations | xi |
| Tables | xi |
| Introduction | 1 |
| Data for the Analysis | 5 |
| Personnel File Data | 5 |
| SRB, Civilian Unemployment Rates, and Military-to- Civilian-Pay Index Data | 6 |
| Zone A Decisions | 10 |
| Reenlisting in the Marine Corps | 13 |
| Descriptive Statistics for Zone A Reenlistments: FY 1980 Through FY 1990 | 13 |
| Estimating the Reenlistment Probability: The Logit Equation | 17 |
| Logit Equation Estimates for Reenlistment Decisions: FY 1980 Through FY 1990 | 18 |
| The Relationships Between Reenlistments, Pay, and Unemployment | 23 |
| SRB Estimates: Differential Effects for AFQT12 Category Marines | 24 |
| Predicted Reenlistment Rates by Marital and Dependency Status | 25 |
| Decisions in FY 1988 Through FY 1990 | 26 |
| Estimating Reenlistments in FY 1988 Through FY 1990 | 27 |
| Out-Year Versus In-Year Reenlistments | 33 |
| Summary and Conclusions | 34 |
| References | 37 |
| Appendix A: Variables on the Retention Database | A-1 - A-4 |
| Appendix B: Primary Military Occupational Specialty Codes | B-1 - B-10 |
| Appendix C: Historical Table of SRB Multiples, by PMOS | C-1 - C-23 |
| Appendix D: The Logit Equation | D-1 |
| Appendix E: Logit Reenlistment Equation Estimates With Separate Indicator Variables for Each SRB Level | E-1 - E-3 |
| Appendix F: Logit Reenlistment Equations for Individual MOSs | F-1 - F-17 |
| Appendix G: Additional Information on In-Year Versus Early Reenlistments | G-1 - G-2 |

ILLUSTRATIONS

| | | Page |
|---|--|------|
| 1 | Quality Recruits (AFQT I-III A HSDGs) as a Percentage of Total Recruits | 1 |
| 2 | Dependency Rates for Enlisted Marines | 2 |
| 3 | Percentage of Marine Corps Accessions, by Length of Initial Contract | 3 |
| 4 | Grade Distribution at First Reenlistment Decision: Recommended and Eligible Marines With Initial Obligations of Four Years | 4 |
| 5 | The Unemployment Rate of 20- to 24-Year-Old Males | 8 |
| 6 | Index of Military Pay to Civilian Pay: Males, Age 20 to 24 | 12 |
| 7 | Example of a Logit Curve | 18 |

TABLES

| | | Page |
|---|--|------|
| 1 | Zone A Decisions for Recommended and Eligible Marines, FY 1980 Through Third Quarter FY 1990 | 11 |
| 2 | Reenlistment Rate, by Characteristics of Recommended and Eligible Marines Making Zone A Reenlistment Decisions, FY 1980 Through FY 1990 | 14 |
| 3 | Logit Coefficients and Derivatives for Reenlistment Decisions, FY 1980 Through FY 1990 | 20 |
| 4 | Reenlistment Rates Predicted by Logit Equations: The Effect of SRBs | 25 |
| 5 | Reenlistment Rates Predicted From Logit Equations: The Effect of Marital/Dependency Status | 26 |
| 6 | Reenlistment Rates, by Characteristics of Recommended and Eligible Marines Making Zone A Reenlistment Decisions in FY 1988, FY 1989, and FY 1990 | 28 |
| 7 | Logit Coefficients and Derivatives for Reenlistment Decisions, FY 1988 Through FY 1990 | 29 |
| 8 | First-Term Recommended and Eligible Population: Statistics by Length of Initial Contract for FY 1989 and FY 1990 | 32 |

INTRODUCTION

In the recent past, there have been substantial changes in the characteristics of enlisted Marines, as well as changes in Marine Corps personnel policy. The impact of these changes on reenlistment decisions of first-term enlisted personnel, and on the ability of the Marine Corps to retain quality personnel, is the subject of this research memorandum.

First, during the past decade, the Marine Corps substantially improved accession quality. Today's enlisted Marines are both smarter and better educated than they were in the earlier years of the 1980s. In the past ten years, the percentage of recruits who were high school diploma graduates (HSDGs, or Tier I) with test scores in the top half of the nationally normed Armed Forces Qualification Tests (AFQT) more than doubled (see figure 1). While it is well known that accessions with these characteristics have lower attrition during the first term of service and higher levels of job performance (see [1 through 4]), there is little information regarding how these Marines respond to reenlistment incentives offered by the Marine Corps.

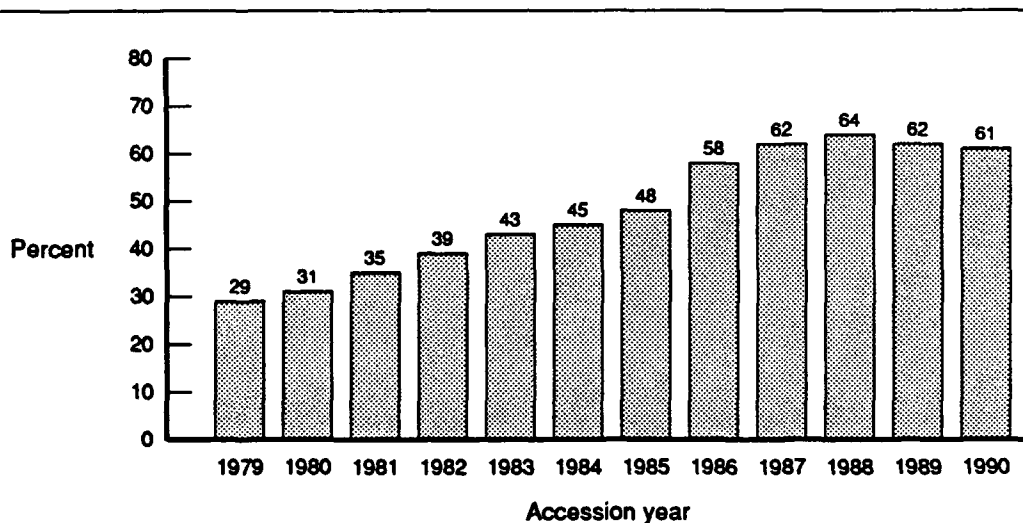


Figure 1. Quality recruits (AFQT I-III HSDGs) as a percentage of total recruits

Second, although the percentage of recruits who enter the Marine Corps married or with dependents has remained virtually unchanged over time, the Marine Corps has experienced substantial increases in the marriage and dependency rate for enlisted personnel, particularly for personnel within the first term of service. Figure 2 details some of these changes; a more complete discussion can be found in [5]. In

addition to budgetary implications for the changes in marital and dependency rates, questions have arisen about possible differences in retention behavior of Marines with different marriage and dependency statuses.¹

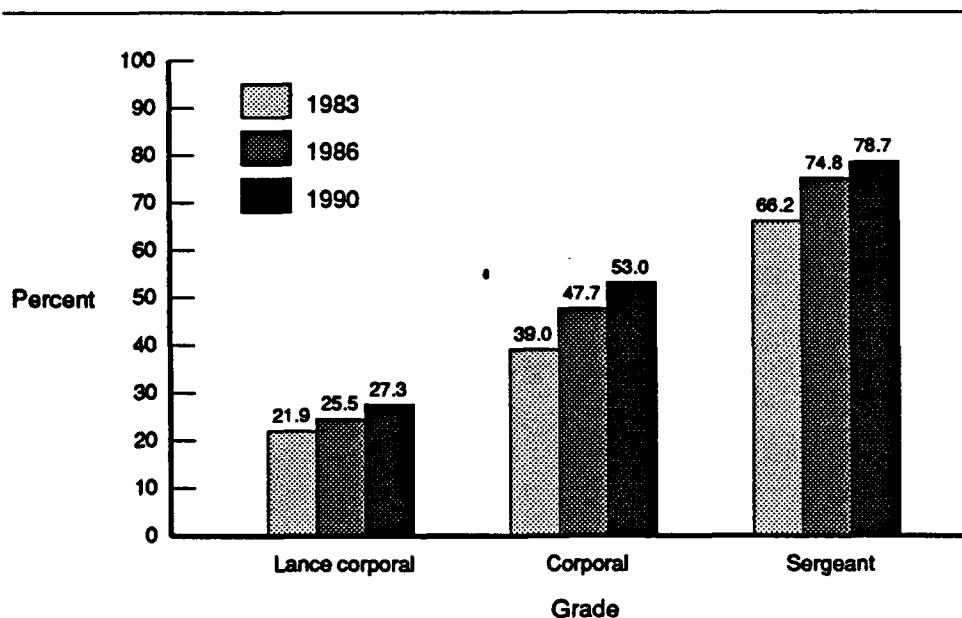


Figure 2. Dependency rates for enlisted Marines

Third, the Marine Corps has made substantial changes in the length of the first-term enlistment contract. While in the early 1980s first-term enlistment contracts were generally three or four years, by the latter part of the 1980s they were generally four or six years (see figure 3). FY 1990 is the first year that substantial numbers of Marines with longer initial enlistment contracts made reenlistment decisions.² Little is known about the impact of the length of initial contract upon the subsequent decision to reenlist or leave the Marine Corps.

1. Additional concerns relate to readiness issues that are outside the scope of this paper.

2. In FY 1990, slightly over 1,000 Marines with five- or six-year initial enlistment contracts made first-term reenlistment decisions. These numbers will grow three- or four-fold in FY 1991 and years following.

Finally, at least since the mid-1980s, there has been an increase in both time in service (TIS) and time in grade (TIG) for promotions to corporal (Cpl) and sergeant (Sgt). This slowdown in promotion has been the result of high retention and little change in the grade structure (see [6] for more information).¹

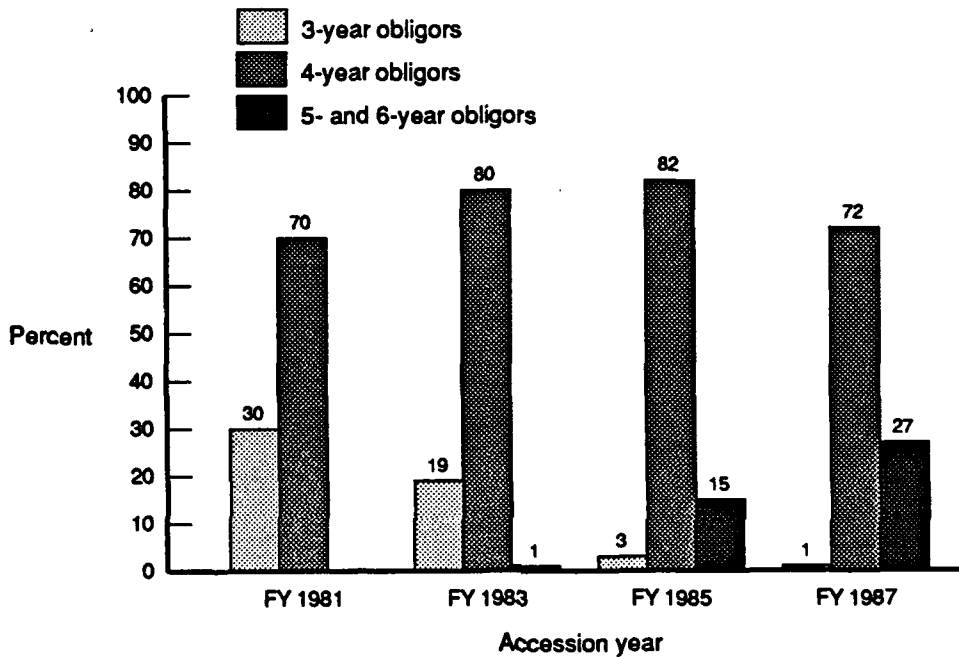


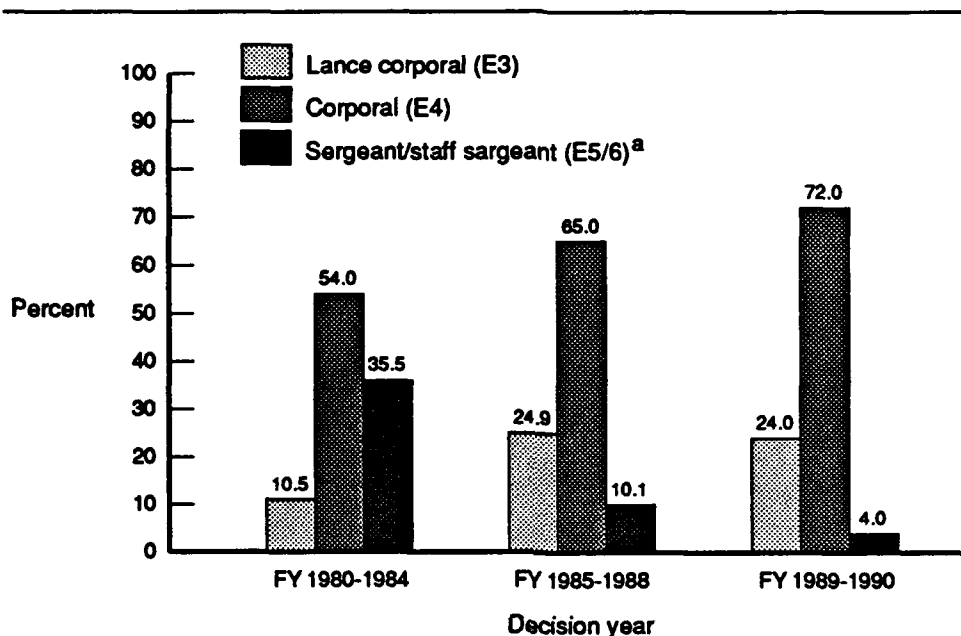
Figure 3. Percentage of Marine Corps accessions, by length of initial contract

Figure 4 illustrates the grade distribution of recommended and eligible Marines making their first reenlistment decisions at three points in time, FY 1980 through FY 1984, FY 1985 through FY 1988, and FY 1989 through June 1990.² In order to reflect only changes in the speed of promotion, the figure depicts only Marines with four-year initial enlistment contracts. While in the early 1980s slightly over 35 percent of Marines making their first reenlistment decision were sergeants, this percentage had shrunk to less than 5 percent in FY 1989

1. Promotions in grades corporal to sergeant-major are vacancy driven. For a promotion to occur, a space must be available in the next grade.

2. See [6] for a more detailed examination of changes in TIS and TIG in the decade of the 1980s.

and FY 1990.¹ Since it is well established that grade is an important factor in the reenlistment decision, it is important to understand how the slowdown in promotion rates has affected reenlistment decisions.



a. Staff sergeants have always been less than 1 percent of this population, (0.5 percent in FY 1980-1984, 0.1 percent in FY 1985-1988, and 0.4 percent in FY 1989-1990).

Figure 4. Grade distribution at first reenlistment decision: recommended and eligible Marines with initial obligations of four years

Against this backdrop of changes in both the characteristics of enlisted Marines and in Marine Corps policy, this work examines the first-term reenlistment decisions of Marines in the FY 1980 through FY 1990 time period. The Marine Corps makes extremely careful selections at this reenlistment point. Local commanding officers certify Marines as recommended and eligible for reenlistment, and Marine Corps monitors at Headquarters determine whether additional personnel are

1. Because of changes in the length of the initial enlistment--in particular, because FY 1989 through FY 1990 were the first years that five- and six-year obligors made reenlistment decisions--figure 4 somewhat overstates the changes in grade for all Marines at the first reenlistment point. In FY 1990, for example, 8 percent of all recommended and eligible Marines making first-term reenlistment decisions were sergeants (see table 8).

required in the Marine's MOS before approval of a reenlistment request.¹ Marine Corps policy states that this "quality cut"--by the Marine's individual record as certified by the Marine's commanding officer and by Marine Corps needs as certified by the monitors--be achieved before promotion to sergeant (E5).

After a detailed examination of reenlistment decisions throughout the entire period, reenlistment decisions in FY 1988 through FY 1990 are separately analyzed to identify possible changes in behavior as well as to investigate the reenlistment behavior of Marines with five- and six-year initial contracts. All analysis is restricted to those Marines that the Marine Corps has deemed "recommended and eligible" for reenlistment.

DATA FOR THE ANALYSIS

Personnel File Data

Other tasks by CNA on the Marine Corps Enlisted Retention Study constructed a permanent longitudinal decision-based personnel file for all enlisted Marines (the longitudinal ARSTAT tracking file--see [7]). This file contains background information, records of all grade changes (promotions/demotions), and a history of all important decisions (accession, effective extensions, reenlistments, and separations) for each enlisted Marine. For each of these decisions, considerable information on the Marine's status at the time of the decision is retained. Updated quarterly, the file begins in October 1978.²

The analysis described in this research memorandum is restricted to reenlistment decisions, by "recommended and eligible" Marines, in the first 72 months of service. These are often called Zone A decisions, and reenlistment bonuses in these length-of-service cells are identified as Zone A reenlistment bonuses. This reenlistment decision is a critical one for the Marine Corps and is currently the only reenlistment decision for which skill requirements of the Corps are taken into account. Marines in their second enlistment are regarded as part of the career force.³

1. The Career Force Alignment Plan determines the skill requirements by MOS. If additional personnel are not required in the Marine's MOS, an attempt is made to find an MOS that is short of personnel and for which the Marine qualifies. The introduction of career force controls in 1985 and 1986 considerably tightened this process.

2. The file is transaction based and includes all accession, reenlistment, and separation information. All transactions for Marines who entered the Marine Corps after 1978 will be found in the file. For Marines who were in the Marine Corps in 1978, only the transactions since 1978 are included in the file.

3. The career force can be defined by length of service, grade, or by the enlistment (second or beyond).

For each decision, variables that reflect the Marine's background characteristics and variables that reflect the Marine's decision or his status at the time of the decision were constructed. Appendix A provides more detail on how the data were constructed. Background characteristics include gender, racial/ethnic group, education and test scores at entry into the Marine Corps, and the length of his initial obligation. Variables that describe the Marine at the time of the decision include the Marine's age, grade, whether or not the Marine had executed an extension before the decision, a set of variables describing marital/dependency status, and the Marine's primary military occupational specialty (PMOS).¹

The final step was to append information that characterized the environment at the time the Marine made the reenlistment decision--the level of the SRB for the Marine's PMOS at the decision, the civilian unemployment rate for 20- to 24-year-old males, and an index of military to civilian pay. Because CNA has been unable to locate information on SRB bonus multiples for either FY 1978 or FY 1979, the Zone A reenlistment database begins in FY 1980.

SRB, Civilian Unemployment Rates, and Military-to-Civilian-Pay Index Data

The direction of relationships between reenlistments and pay (either through bonuses or regular compensation) has been well established both theoretically and empirically (see [8], [9], or [10]). Other things being equal, larger bonuses or higher levels of military pay relative to civilian pay are associated with higher reenlistment rates. Similarly, higher civilian unemployment rates are associated with higher retention rates for military personnel.

Occasionally, however, the meaning of these relationships is still misunderstood. The theoretical model does not say that a Marine will leave the Corps if the Marine can earn more in the civilian sector than in the Marine Corps. There are clearly substantial numbers of Marines who would earn more as civilians than they earn as Marines (and, conversely, probably nontrivial numbers of ex-Marines would have been better off financially had they remained in the Corps).

1. Most analyses in this paper group the PMOSs into seven categories. Appendix B details the categories by PMOS and also contains a count of the number of decisions by PMOS for a random sample of almost 27,000 Zone A reenlistment decisions in the FY 1980 through June 1990 period. In recent years, a small number of reenlistees have received a selective reenlistment bonus (SRB) for their additional military occupational specialty (AMOS). AMOS information for the Marine was not available on the input tapes used to create the ARSTAT longitudinal tracking file. Thus, in this analysis, any SRBs given for an AMOS are ignored; all SRB information is based on the Marine's PMOS.

The relationship is probabilistic rather than deterministic, suggesting that changes in the relative compensation can change reenlistment probabilities. And, with given preferences or attitudes toward military life, some Marines would be indifferent between staying or leaving the Marine Corps, and changes in military pay relative to civilian pay would result in some Marines deciding whether or not to stay. Thus, other things being equal, when military compensation rises relative to civilian compensation, reenlistment rates can be expected to increase.

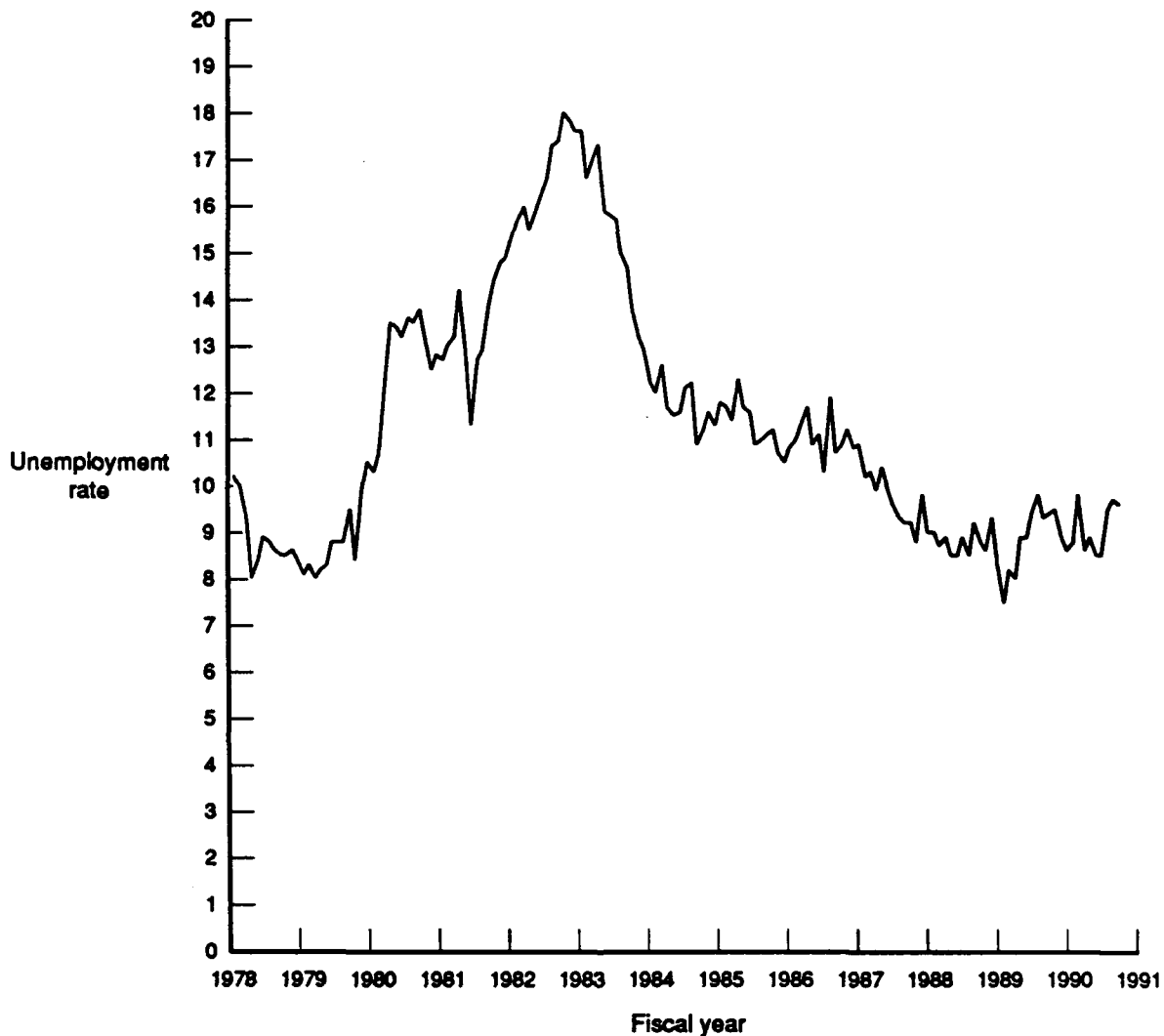
An SRB is a reenlistment incentive used carefully by Marine Corps planners to shape the composition of reenlistments. (The total number of bonus dollars a Marine will receive is determined by multiplying the SRB multiple (from zero to six) by the Marine's monthly base pay and then by the number of years for which the individual reenlists.) Since FY 1983, the Marine Corps has paid reenlistment bonuses only for reenlistments of four years or longer. Planners affect reenlistment rates by varying the bonus multiples for the different MOSs. Previous work at CNA had established historical SRB bonus multiple files from FY 1980 to FY 1985 (see [11]). These were updated with Marine Corps messages through June of 1990 and are reproduced in table C-1 of appendix C.¹

Some MOSs have never had an SRB, while others have usually had an SRB. As the information in appendix C illustrates, however, the general pattern is frequent adjustments in the multiple to a particular MOS, as Marine Corps planners try to shape the force. For example, PMOS 0231 (Intelligence Specialist) had SRB levels of zero, one, three, four, and five over this ten-year period. The level was zero for most of FY 1980; three for FY 1981-1982; four, then three, then one for FY 1983; one or zero for FY 1984 and FY 1985; and three, four, or five since FY 1986.

The civilian unemployment rate for 20- to 24-year-old males was chosen as an overall barometer of the ease or difficulty of finding civilian employment (see figure 5). The variation in the unemployment rate over the time period has been substantial, with the 1983 recession clearly visible in the figure.

1. The change from three- to four-year reenlistments for SRB eligibility was made in FY 1983, and it can be clearly seen in the length of reenlistment commitments made by Marines in MOSs offering SRBs. Additionally, the Marine Corps has not offered level-six SRBs since FY 1983 (see table C-2 of appendix C).

Depending upon the decision year, between 2 and 5 percent of the reenlistees in MOSs with SRBs reenlisted for a shorter time than was required for payment of the SRB. For example, there were 4,892 reenlistments in FY 1989 (2,165 in MOSs with a bonus and 2,727 in MOSs without a bonus). In the MOSs without a bonus, 7 percent of the reenlistments were for two years, 40 percent for three years, 50 percent for four years, and 3 percent for five or six years. In the MOSs with an SRB, 2 percent of the reenlistments were for two years, 2 percent for three years, 79 percent for four years, and 17 percent for five or six years.



SOURCE: Bureau of Labor Statistics; all rates are seasonally adjusted.

Figure 5. The unemployment rate of 20- to 24-year-old males

Previous analyses of reenlistment decisions have taken one of two general approaches to modeling the impact of compensation. One approach utilizes the annualized cost of leaving (ACOL) methodology (see [8 through 11]). This methodology focuses the reenlistment decision on differences in future expected compensation for the two choices (remaining in the Marine Corps or leaving for civilian sector employment). For each Marine an ACOL variable is constructed that reflects the difference in expected compensation (military minus civilian) over the work

horizon.¹ The main difficulty with the ACOL methodology is that it has been difficult to update (or project) these expected pay streams accurately.

The alternative approach, used here, is to construct a pay index that reflects only the changes in average levels of military-to-civilian compensation. Unlike the ACOL model, in this approach only some of the impact of pay on the reenlistment decision is attributed to the pay variable. Some differences in reenlistment propensities for Marines with given characteristics are probably related to differences in relative pay.² Measuring the impact of pay by an index has several advantages, the most important being that such an index is straightforward to update and project.

Average military pay is a function of the congressionally authorized increases to the pay table as well as an individual's length of service and grade. It was decided to make our military pay variable reflect only changes in the pay table.³ For average civilian pay, the Bureau of Labor Statistics publishes a quarterly series on the "usual weekly earnings" of full-time wage and salary workers [13]. To reflect the civilian opportunities for Marines making zone A reenlistment decisions, the usual weekly earnings of full-time 20- to 24-year-old male wage and salary workers was used.⁴

1. Expected civilian earnings are estimated as a function of education, race/ethnic background, gender, AFQT category, etc. These earnings are projected until retirement, and then the entire expected earnings stream is appropriately discounted to the present-year dollars. The expected earnings stream, should the Marine remain in the Corps, is computed, discounted to present-year dollars. The annualized cost of leaving is the difference between the military and civilian pay streams.

2. Any systematic deviation from the average relative compensation for Marines with given characteristics will be reflected in differences in reenlistment propensities for Marines with those characteristics. For example, female Marines are more likely to reenlist than male Marines. A part of the reason for the higher female reenlistment rate may be due to differences in military/civilian pay ratios for them.

3. For military pay, the last Quarterly Review of Military Compensation had built a series for regular military compensation (see [12]). The study team updated this series to the present. All the statistical models reported in this paper contain the individual's grade and the length of his initial contract. Thus, some of the impact of pay will be found in the effects estimated for grade and years of service.

4. The last decade has shown considerable change in the civilian earnings of males in different age groups. In particular, the earnings of males in their twenties have fallen relative to the earnings of older males. Thus, using a wage index for all males would increasingly overstate the civilian wage opportunities for young males in the years of the 1980s.

The pay index was constructed by dividing the military pay series by the civilian pay series and normalizing the index to 1.0 for the first quarter of FY 1979. Because military pay changes only periodically (usually once a year) and the civilian pay changes each quarter, an index constructed simply by dividing military pay by civilian pay would jump up at the increase in the pay table and then gently erode for the next three quarters. Military pay increases are, however, anticipated and usually announced months in advance. Thus, the index was smoothed by averaging (the pay index is the simple average of pay index value for the current quarter and for the next two quarters).

Figure 6 displays how the pay index has changed over time. The 1981 and 1982 military pay increases were substantial and are clearly visible in the figure. Since FY 1983, however, the index has been relatively flat, meaning that there has been no trend since 1983 in the relationship between average military and civilian pay for young men.¹

Zone A Decisions

There were over 225,000 zone A decisions (reenlist, extend for at least one year, or separate recommended and eligible) between FY 1980 and June 1990. Table 1 summarizes these decisions. First, there has been considerable variation in both the reenlistment rate and the number of reenlistments per year. Generally, however, there were more decisions in the early years of the 1980s when the length of the first-term contract was shorter. Second, extensions of one year or more have never been very common for first-term Marines. There have been virtually no long extensions since FY 1983 and none at all since FY 1984. Since an extension merely postpones the time when a decision to reenlist or separate is made, it was decided to restrict the analysis to "final" decisions--to reenlist or to separate.²

Table 1 further divides reenlistments into those made within the fiscal year the initial contract expires (in-year reenlistments) and those made before the fiscal year the initial contract expires (out-year reenlistments). Analysis of the impact of bonuses or military pay needs to take all reenlistments into account in order to obtain unbiased estimates. Marine Corps end-strength planners, however, focus on meeting end-strength for the current fiscal year. Marines whose contracts will expire in the next fiscal year are committed for this fiscal year: that is, whether they reenlist now has no effect on current year's

1. The index was normalized to 1 for the first quarter of FY 1979. The choice of normalization period is arbitrary. The usefulness of the index is in identifying changes in relative compensation between the military and civilian sectors. The precise value of the index at a point in time is not particularly meaningful.

2. Marines who extend are not excluded from the data set; they enter as an observation when they finally make a decision either to reenlist or to leave.

Table 1. Zone A decisions for recommended and eligible Marines, FY 1980 through third quarter FY 1990

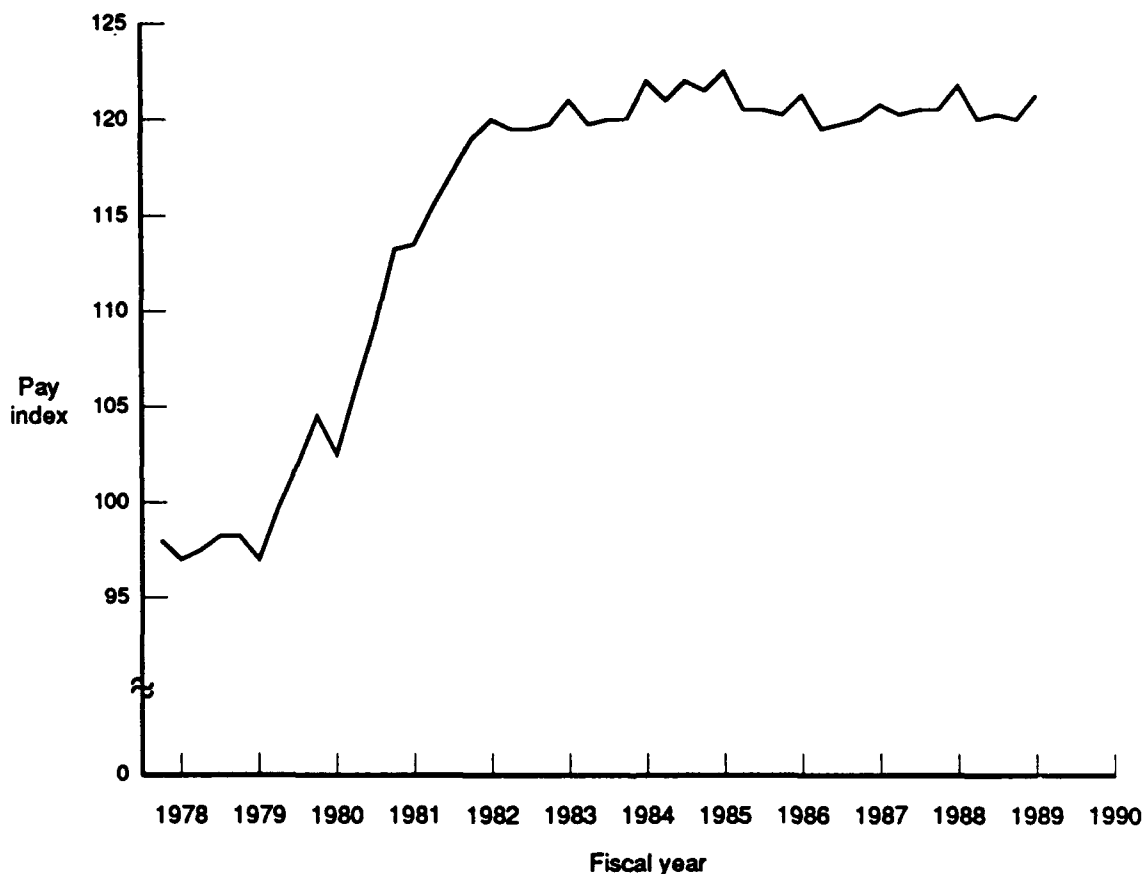
| Fiscal year | Reenlistments | | | | |
|-------------------|-----------------------------|--|---|---|--------------------------|
| | (1) Total reenlist-ments | (2) In-year reenlist-ments ^a | (3) Out-year reenlist-ments ^a | (4) Number that extend at least one year | (5) Number that leave |
| 1980 | 5,515 | 2,991 | 2,524 | 996 | 17,306 |
| 1981 | 7,540 | 3,836 | 3,704 | 897 | 14,900 |
| 1982 | 7,106 | 4,504 | 2,602 | 1,343 | 12,222 |
| 1983 | 7,522 | 5,808 | 1,714 | 1,812 | 12,157 |
| 1984 | 9,493 | 5,937 | 3,556 | 26 | 11,453 |
| 1985 | 8,216 | 4,845 | 3,371 | 0 | 13,254 |
| 1986 | 9,293 | 5,112 | 4,181 | 0 | 13,080 |
| 1987 | 7,571 | 3,687 | 3,884 | 0 | 13,335 |
| 1988 | 5,608 | 4,290 | 1,318 | 0 | 15,570 |
| 1989 ^b | 4,892 | 3,528 | 1,364 | 0 | 12,357 |
| 1990 ^b | 3,543 | 2,916 | 627 | 0 | 8,635 |
| | | | | | .24 |
| | | | | | .34 |
| | | | | | .37 |
| | | | | | .38 |
| | | | | | .45 |
| | | | | | .39 |
| | | | | | .42 |
| | | | | | .36 |
| | | | | | .26 |
| | | | | | .28 |
| | | | | | .29 |

NOTE: Includes Marines whose component codes indicate that they count for active-duty end strength (11, 12, 13, 3B, A2, A3, A5, A7, AA, AB, C1, C2, C3, C9, CB, CD, CH), who have less than 72 months of service, and who have not previously received a Zone A bonus. Of the 225,642 decisions, 4,707 (2.1 percent) were on two-year contracts, 51,652 (22.9 percent) were on three-year contracts, 166,406 (73.7 percent) were on four-year contracts, 260 (0.1 percent) were on five-year contracts, and 2,617 (1.2 percent) were on six-year contracts before the decision. Marines on two-year contracts were primarily making their second reenlistment decision in Zone A; over 80 percent of these decisions were in FY 1980 through FY 1984 (three-year initial contracts, followed by two-year reenlistments without a selected reenlistment bonus (SRB), and then the decision captured in this analysis).

a. In-year reenlistments are defined as reenlistments in the fiscal year of the end current contract (ECC). Out-year reenlistments are defined to be reenlistments in a year prior to the ECC.

b. Through the third quarter only. It is assumed that reenlistments in the fourth quarter of FY 1990 will be primarily out-year reenlistments.

endstrength because their current contracts commit them for this fiscal year. Because strength planners must estimate this year's expected losses in order to derive required accessions, predicting in-year reenlistments--reenlistments of Marines whose contract will expire within the year--are of particular importance. Possible differences in the characteristics of Marines who reenlist out-year versus in-year will be analyzed separately in a later part of the paper.¹



NOTE: Constructed by CNA using data from OASD (FM&P) and Bureau of Labor Statistics

Figure 6. Index of military pay to civilian pay: males, age 20 to 24

1. Marine Corps policy concerning out-year reenlistments has changed over time. In FY 1983, for example, the Marine Corps stopped all out-year reenlistments in mid-year. Because a complete historical record for these policies was unavailable, the analysis of in-year versus out-year reenlistments was restricted to recent reenlistment decisions.

While it is possible to tabulate decisions for over 225,000 Marines, it is not practical to estimate retention models with this number of observations. Thus, from this universe of all reenlistment or separation decisions of zone A enlisted Marines from FY 1980 through the third quarter of FY 1990, a random sample was drawn for analysis.¹ The final sample included the reenlistment or separation records for 26,840 Marines.

REENLISTING IN THE MARINE CORPS

Descriptive Statistics for Zone A Reenlistments: FY 1980 Through FY 1990

Table 2 details the characteristics of the sample. There were 8,702 reenlistments and 18,138 separations (an average reenlistment rate of 32.4) for this random sample of recommended and eligible Marines making first-term reenlistment decisions in the FY 1980 through FY 1990 period. The explanatory variables that will be used to differentiate reenlistment probabilities are grouped in the table by category (SRB level, grade, etc.). The table details the percentage of the sample represented by the characteristic, the reenlistment rate for Marines with the particular characteristic, and whether or not Marines with the characteristic have more than an average proportion of their reenlistments out-year. A close examination of the differences in reenlistment rates shown in these tabulations is warranted, as the multivariate statistical analyses that follow substantiate the story told by these average differences.

The first category is the SRB level offered the Marine. Over the period, 55.5 percent of Marines making this reenlistment decision were not offered an SRB, 9.8 percent were offered a level-one bonus, 16.7 percent a level-two bonus, 8.0 percent a level-three bonus, 6.9 percent a level-four bonus, 2.3 percent a level-five bonus, and 0.8 percent a level-six bonus.² The table reveals a strong and regular impact for SRB on the decision to reenlist. The average difference in the reenlistment rate for Marines offered a level-one SRB (versus no SRB) is 10 percentage points. And, the average reenlistment rate rises about 6 percentage points for each unit increase in the SRB level. Moreover, SRBs tilt the reenlistments toward early (out-year) decisions.

As expected, Marines who make a zone A decision at a higher grade are more likely to reenlist. While only 21.2 percent of lance corporals reenlisted, 33.5 percent of corporals and 44.5 percent of sergeants reenlisted. Since table 2 summarizes information from over a decade of decisions, however, several factors are embedded in these average differences in reenlistment rates by grade. One important factor is the slowdown in the speed of promotion over the decade.

1. A small number of observations were dropped because of missing or clearly bad data.

2. There have been no level-six bonuses offered since FY 1983.

Table 2. Reenlistment rate by characteristics of recommended and eligible Marines making Zone A reenlistment decisions, FY 1980 through FY 1990

| Characteristic | Percent of sample ^a | Reenlistment | |
|--|--------------------------------|--------------|---|
| | | Rate (%) | More likely than average to be out-year |
| Overall average | | 32.4 | |
| SRB level offered | | | |
| None | 55.5 | 24.6 | No |
| Level one | 9.8 | 34.5 | Yes |
| Level two | 16.7 | 39.1 | Yes |
| Level three | 8.0 | 45.7 | Yes |
| Level four | 6.9 | 50.6 | Yes |
| Level five | 2.3 | 53.5 | Yes |
| Level six | .8 | 59.6 | Yes |
| Grade | | | |
| E3 | 23.0 | 21.2 | Yes |
| E4 | 58.8 | 33.5 | No |
| E5/6 | 18.2 | 44.5 | Yes |
| Marital/dependency status | | | |
| Not married, no dependents | 64.6 | 24.8 | No |
| Not married, dependents | 2.6 | 48.4 | No |
| Married | 35.4 | 44.6 | Yes |
| Either married or with dependents | 38.0 | 44.9 | Yes |
| Two or more dependents | 13.0 | 49.0 | Yes |
| Other individual background characteristics ^b | | | |
| Male | 95.2 | 31.6 | No |
| Female | 4.8 | 49.0 | Yes |
| Black | 18.0 | 50.2 | No |
| Hispanic | 5.7 | 31.2 | No |
| Not black or hispanic | 76.3 | 28.3 | Yes |
| HSDG (Tier I) | 84.5 | 31.1 | No |
| AFQT I-II | 22.7 | 30.5 | Yes |
| AFQT I-IIIA | 37.9 | 31.2 | Yes |
| Length of prior contract | | | |
| Three years | 21.3 | 29.2 | No |
| Four years | 77.6 | 33.2 | Yes |
| Five or six years | 1.1 | 39.1 | Yes |

Table 2. (Continued)

| Characteristic | Percent of sample ^a | Reenlistment | |
|-------------------------------|--------------------------------|--------------|---|
| | | Rate (%) | More likely than average to be out-year |
| Other Marine Corps background | | | |
| Extension prior to decision | 11.0 | 46.4 | No |
| MOS area | | | |
| Infantry | 27.7 | 23.3 | No |
| Air mechanical, fixed-wing | 5.7 | 36.3 | Yes |
| Air mechanical, helicopter | 3.1 | 33.1 | No |
| Air technical | 8.6 | 32.9 | Yes |
| Air, other | 5.1 | 40.4 | Yes |
| Other technical | 9.7 | 28.1 | No |
| Administration | 13.1 | 44.5 | No |
| Other, MOS | 27.0 | 35.1 | Yes |

a. The data are a random sample of 26,840 Zone A reenlistment decisions in FY 1980 through FY 1990.

b. If missing AFQT categories are omitted, 32.9 percent of the individuals leaving were AFQT categories I and II (23.4/(100-28.8)) and 27.2 percent of the reenlistees were AFQT categories I and II (21.4/(100-29.4)).

Significantly smaller proportions of Marines are currently making reenlistment decisions at the rank of sergeant (and larger proportions at the rank of lance corporal) than were in the early 1980s. And, while the reenlistment rates each year show sharp differentiation within each grade, the reenlistment rates by grade have changed over the years. For FY 1980 through FY 1983 decisions, the reenlistment rates were 12.2 percent for lance corporals, 30.3 percent for corporals, and 40.6 percent for sergeants/staff sergeants; for FY 1984 through FY 1990 decisions, the reenlistment rates were 24.3 percent for lance corporals, 34.9 percent for corporals, and 49.2 percent for sergeants/staff sergeants. Thus, over the decade, reenlistment rates increased somewhat within each grade, with the rate for lance corporals effectively doubling.

The effects of grade on reenlistment timing (out-year versus in-year) are complicated. First, there are partly definitional effects because an earlier decision means there is less time for a promotion. Second, there is the strong tendency of Marines with five- or six-year initial contracts to reenlist out-year (these Marines have a higher grade distribution). The outcome of these two somewhat conflicting forces is that reenlistments of lance corporals and sergeants are more likely than average to be out-year reenlistments.

The next category of variables summarizes marital and dependency statuses. The results support findings for other services (see [5]). Thus, while the findings in the table are not surprising, the authors are not aware of any previous analysis of Marine Corps retention that explicitly examined marital or dependency status. Reenlistment rates of Marines are sharply delineated by marital/dependency status: Marines who are married (or who have dependents) are considerably more likely to reenlist than those who are single. While only 24.8 percent of single Marines *without* dependents reenlist, 44.6 percent of married Marines reenlist. Although the proportion of single Marines *with* dependents is not large, almost half of these Marines reenlist. Marines with two or more dependents (regardless of marital status) were 13 percent of the population of recommended and eligible Marines; 49 percent of these Marines reenlist. Additionally, over the decade of the 1980s married Marines appear to be more likely than average to be out-year reenlisters.¹

The relationship between AFQT test score categories and the reenlistment/leave decision is complicated by the fact that accurate categories are missing for almost 30 percent of the Marines making these decisions in the 1980s. Generally, however, the high AFQT scorers (categories I and II) as well as HSDG Marines are slightly less likely than other Marines to reenlist. High AFQT score category recruits and HSDG recruits are, however, more likely to complete the first-term (not attrite) than are other recruits. Thus, these quality recruits are more heavily represented in the population making reenlistment decisions than they were in the initial recruit cohort. (See [3] for more discussion on this point.)

Other differences in reenlistment rates include higher rates for females, blacks, and those who executed an extension prior to the enlistment decision.² For the MOS groupings, the reenlisters are less likely to be from infantry MOSs, and more likely to be from administrative MOSs, than are the individuals who separate.³

1. Analysis of more recent data, in particular the mix of in-year/out-year reenlistment decisions in FY 1989 does not show this pattern of married Marines being more likely than average to reenlist out-year. These findings are discussed later in the paper.

2. Most of these extensions are very short. Executing an extension after the initial contract expired was considerably more common in the early 1980s than it has been recently. In FY 1989, for example, only 4 percent of recommended and eligible Marines executed extensions before making their leave/reenlist decision, whereas for the entire period, 11 percent of Marines executed an extension before making their final decision.

3. Appendix B shows how the MOSs have been grouped into the seven large areas.

While tabulations of reenlistment rates by different characteristics of Marines making reenlistment decisions can provide considerable insight into the factors associated with the reenlistment decision, they can also obscure relationships important to Marine Corps planners. For example, there is virtually no difference in the average values of the pay index for Marines who reenlisted versus Marines who separated (1.17 versus 1.16). Yet virtually all reenlistment studies have found a strong relationship between pay indices and reenlistment rates (see [8 through 11]). To obtain valid estimates of the effects of particular variables on the reenlistment decision, a multivariate model must be estimated. Only in such a model can confounding effects be statistically separated.¹

Estimating the Reenlistment Probability: The Logit Equation

Each of the 26,840 Marines in our sample either reenlisted or separated from the Marine Corps. Thus, it is a dichotomous decision (reenlist, don't reenlist) that requires examination. One wants to restrict the estimating function to credible values (probabilities of reenlisting no smaller than zero or larger than one). A common functional form is a binomial logit (discussed in more detail in appendix D). Logit equations estimate gently sloped S-shaped curves between the probability bounds of zero and one. Figure 7 illustrates a logit curve.

The estimating equation is nonlinear and is estimated by maximum likelihood techniques.² The estimated coefficients and associated t-statistics indicate the direction and the strength of the statistical relationship. The coefficients are used to calculate the slopes (or derivatives) of the relationships or to estimate the reenlistment probabilities predicted by the equation for different categories of Marines.³

1. The attempt with a multivariate model is to partition out the independent effects of grade, compensation, marital status, etc., on the reenlistment decision. Some characteristics, however, vary together. For example, Marines with longer initial enlistment contracts are more likely to be older, married, and of a higher grade at the first reenlistment decision point. If the characteristics are too highly intercorrelated, independent effects cannot be estimated. (Technically, this is called multicollinearity.) Fortunately, there is sufficient variation in the data to allow estimation.

2. All estimation was done with the statistical package LIMDEP.

3. Since the function is nonlinear, the value of the derivative depends on where it is evaluated. Most of the work in this paper evaluates the derivative at the mean of the data.

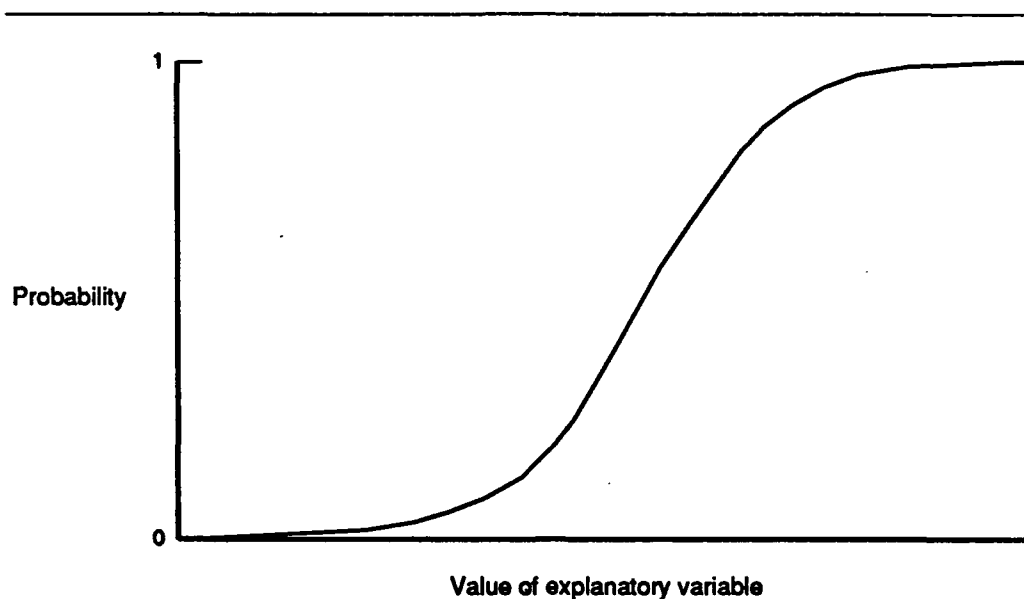


Figure 7. Example of a logit curve

LOGIT EQUATION ESTIMATES FOR REENLISTMENT DECISIONS: FY 1980 THROUGH FY 1990

The probability of reenlistment will be estimated as a function of the SRB bonus multiple (SRB_LEV), grade, background characteristics, the length of the initial contract, whether or not there was an extension immediately before to the decision, the MOS group, the pay index, and the civilian unemployment rate. Some specifications will omit the latter two variables (the pay index and the civilian unemployment rate) and substitute a set of fiscal year control variables.¹ A fiscal year control variable will "pick up" any effects that are peculiar to the year; these include any changes in attitudes in addition to changes in pay and the civilian unemployment rate.

Finally, a variable called SRB_AFQT12 is included in the specifications. It is designed to capture any additional impact that SRBs may have on the reenlistment decisions for Marines testing in the top two categories of the AFQT (AFQT12 Marines). This variable assumes a value

1. Estimating the equation with fiscal year control variables and either the pay index or the unemployment rate would confine the effects of pay and unemployment to effects within particular fiscal years. Since pay and unemployment vary little within particular years (and since the variation of interest is the change in these variables over the different years), the economic variables are not included in the equations that include fiscal year variables.

of one for each AFQT12 Marine who will receive an SRB if he reenlists; otherwise, the variable is zero.

Table 3 presents the logit coefficient estimates for the two basic specifications for the reenlistment equation. Specification 1 includes the pay index and civilian unemployment rate variables. Specification 2 omits these two variables and includes instead a set of control variables, one for each fiscal year.¹

The estimating equations fit the data extremely well. Coefficient estimates are statistically significant at very high levels (except for the Hispanic control variable, two MOS groups, and two of the fiscal year control variables). Additionally, the large chi-square statistics indicate very high levels of statistical significance for the entire equation. What, then, do these equations predict?

Overall, the results suggest that higher SRBs, higher grade, and longer initial enlistments are associated with higher reenlistment rates. Additionally, females, blacks, and married individuals are more likely to reenlist than other groups. Higher levels of the military-to-civilian pay (pay index) or higher civilian unemployment rates are additionally associated with higher reenlistment probabilities. AFQT12 Marines are less likely to reenlist, but for these Marines the SRB program provides an additional positive reenlistment inducement.²

Next to the coefficient estimates for each specification, the derivative (calculated at the average reenlistment rate) is detailed. Derivatives provide the predicted change in the reenlistment rate for a small change in the variable. For example, both specifications suggest that a one-level increase in the bonus multiple (SRB_LEV)³ will raise the predicted reenlistment rate 6.6 percentage points (.066).

-
1. Generally for categorical variables (for example, male versus female), one category needs to be omitted in order to estimate the equation. The coefficient estimates for the categorical variables are then interpreted as differences from the omitted category. Thus, for gender, the included variable is "male" and the estimated reenlistment effects for the variable are the differences in male relative to female retention behavior. Similarly, the estimates in table 3 omit a variable for FY 1990. Thus, the effects estimated for the different fiscal years should be understood as that year's impact, relative to the omitted year, FY 1990.
 2. In another specification, the SRB level was also interacted with AFQT12. The results of this estimation, not reported, were similar to those reported in the text.
 3. Appendix E contains logit equation estimates similar to those in table 3, but with separate indicator variables for each SRB level.

Table 3. Logit coefficients and derivatives for reenlistment decisions, FY 1980 through FY 1990

| | Mean value | Specification 1 | | Specification 2 | |
|-----------------------------|---------------|--------------------|------------|--------------------|------------|
| | | Coefficient | Derivative | Coefficient | Derivative |
| SRB_LEV | 1.114 | .301** (26.56) | .066 | .302** (26.02) | .066 |
| SRB_AFQT12 | .110 | .177** (2.57) | .039 | .193** (2.79) | .042 |
| AFQT12 | .227 | -.204** (-3.75) | -.045 | -.231** (-4.21) | -.051 |
| Cpl | .588 | .642** (16.27) | .141 | .648** (16.27) | .142 |
| Sgt | .179 | .989** (19.08) | .215 | .973** (18.72) | .213 |
| SSgt | .003 | 2.134** (7.77) | .468 | 2.129** (7.67) | .467 |
| Married or dependents | .380 | .831** (28.66) | .182 | .828** (28.37) | .181 |
| Pay index | 1.167 | 2.657** (8.20) | .582 | No | No |
| Civilian unemployment | .116 | 2.604** (4.19) | .571 | No | No |
| Length of first contract | 3.807 | .072* (2.17) | .016 | .099** (2.89) | .022 |
| Prior extension | .110 | .458** (10.30) | .100 | .440** (9.81) | .096 |
| Male | .953 | -.235** (-3.62) | -.052 | -.228** (-3.49) | -.050 |
| HSDG | .845 | -.116** (-2.90) | -.025 | -.109** (-2.72) | -.024 |
| Black | .180 | 1.066** (28.91) | .234 | 1.072** (28.85) | .235 |

Table 3. (Continued)

| | Mean value | Specification 1 | | Specification 2 | |
|-------------------------------|---------------|---------------------|------------|---------------------|------------|
| | | Coefficient | Derivative | Coefficient | Derivative |
| Hispanic | .057 | .116* (1.87) | .025 | .140* (2.25) | .031 |
| Infantry | .277 | -.415** (-10.50) | -.091 | -.440** (-11.03) | -.096 |
| Air mechanical, fixed-wing | .057 | -.219** (-3.41) | -.048 | -.242** (-3.75) | -.053 |
| Air mechanical, helicopter | .031 | -.267** (-3.20) | -.059 | -.306** (-3.65) | -.067 |
| Air, technical | .086 | -.518** (-8.64) | -.114 | -.542** (-8.99) | -.119 |
| Air, other | .039 | -.059 (-.782) | -.013 | -.075 (-.998) | -.016 |
| Other, technical | .097 | -.095 (-1.75) | -.021 | -.099 (-1.82) | -.022 |
| Administrative | .131 | .441** (9.55) | .097 | .433** (9.33) | .095 |
| FY 1980 | .094 | No | No | -.700** (-7.44) | -.153 |
| FY 1981 | .090 | No | No | -.252** (-2.75) | -.055 |
| FY 1982 | .081 | No | No | -.278** (-3.23) | -.061 |
| FY 1983 | .084 | No | No | .050 (.632) | .011 |
| FY 1984 | .090 | No | No | .286** (3.80) | .063 |
| FY 1985 | .095 | No | No | -.006 (-.077) | -.001 |

Table 3. (Continued)

| | Mean value | Specification 1 | | Specification 2 | |
|---------------------------|---------------|----------------------|------------|----------------------|------------|
| | | Coefficient | Derivative | Coefficient | Derivative |
| FY 1986 | .106 | No | No | .352** (4.86) | .077 |
| FY 1987 | .100 | No | No | .261** (3.57) | .057 |
| FY 1988 | .105 | No | No | -.394** (-5.25) | -.086 |
| FY 1989 | .088 | No | No | -.206** (-2.71) | -.045 |
| AFQT missing | .290 | .173** (3.35) | .038 | .273** (4.90) | .060 |
| Constant | 1.000 | -5.573** (-13.52) | | -2.226** (-13.22) | |
| Chi square | | 4,478.4 | | 4,728.0 | |
| Number of observations | | 26,840 | | 26,840 | |

- NOTES: (1) The number in parentheses beneath each coefficient is an asymptotic t-statistic.
- (2) ** Coefficient is statistically significant at the 1-percent level (two-tailed test).
- (3) * Coefficient is statistically significant at the 5-percent level (two-tailed test).

Many of the explanatory variables in table 3 are indicator variables that assume the value of 1 if the Marine is in the appropriate category (AFQT12, Cpl, Sgt, SSgt, etc.). As above, the derivatives for these variables can be used to estimate changes in the reenlistment rate for small changes in the variables (for example, seeing how the reenlistment rate would be expected to change if the proportion married increased by .10). Probably, however, the effects of these variables are more easily captured in tables that contain estimated reenlistment

probabilities for Marines with different characteristics.¹ These tables will be detailed later in the paper.

Attempts were made to verify the basic model for individual MOSs. Appendix F contains estimates for eight different MOSs, six for which the sample contained sufficient numbers of observations for model estimation and two (MOSs 0231 and 0431) for which it was necessary to extract all zone A decisions from the 225,000-decision database before estimation could be done. The results for the individual MOSs confirm the findings reported in table 3 for the aggregate model, although there are clearly some differences by MOS.

The Relationships Between Reenlistments, Pay, and Unemployment

Higher levels of military pay relative to civilian pay or of the civilian unemployment rate increase Marine Corps enlistments. An increase of 1 percentage point in either of these variables is associated, on average, with an increase of about 0.6 percentage point on the overall reenlistment rate. While table 3 reports these derivatives, the effects can also be reported as elasticities. In fact, the effect of pay on reenlistments is frequently reported as a reenlistment elasticity. The elasticity is the percentage change in the reenlistment rate that can be expected from a 1-percent change in the pay index. (Note that elasticities are not percentage points.) The pay elasticity derived from the estimates in table 3 is 2.1, meaning that a 1-percent increase in the pay index is associated with a 2.1-percent increase in the reenlistment rate; similarly, a 1-percent decrease in the pay index would, other things equal, be associated with a 2.1-percent decrease in the reenlistment rate. This responsiveness of Marine Corps reenlistments to changes in the ratio of military-to-civilian pay is well in line with those reported in other studies (see [1] for a good summary of earlier work).²

The average value for the 20- to 24-year-old male unemployment rate over the time period is .116 (or, as it is usually reported, an

1. The derivatives should be understood as the estimated change in the reenlistment rate for a small change in the indicator variable. For example, the estimated grade effects are all relative to the omitted grade of lance corporal. The derivative for the variable corporal is .141. Incrementing the variable corporal by .10 (effectively enriching the grade structure of the population making reenlistment decisions by increasing the number of corporals and decreasing the number of lance corporals) is estimated to change the average reenlistment rate by .014 (from .324 to .338).

2. These elasticities are calculated at the average reenlistment rate of .32 and at the average value of the pay index of 1.17. For example, a 1-percent increase in pay would raise the pay index to 1.18 (1.17 times 1.01) and would be associated with an increase in the reenlistment rate to .33 (1.021 times .32).

11.6 percent unemployment rate).¹ The reported derivative is .571, suggesting that an increase in the unemployment rate from .116 to .126 would be associated with an increase in the average reenlistment rate of a little over half a percentage point. This effect should be evaluated in terms of what are common percentage changes in the unemployment rate for 20- to 24-year-old males (see figure 5). Young male unemployment rates are quite volatile. During the period of this analysis, the rate varied from 7.5 to 18.0--an 11.5-percentage-point range.

SRB Estimates: Differential Effects for AFQT12 Category Marines

SRB bonuses have been very effective in targeting Marine Corps reenlistments. Table 3 showed an average impact of over 6 percentage points in the reenlistment rate for an increase of one in the bonus level.² These bonuses, however, have had an additional impact on the reenlistment decisions of Marines who scored in categories I and II on the AFQT. On average, the additional impact of having an SRB (versus no SRB) for an AFQT12 Marine is an increase of 3 percentage points in the reenlistment rate. That these bonuses additionally affect on the reenlistment decision of these Marines is probably not surprising, since these Marines, on average, are probably offered better opportunities in the civilian sector than are Marines with lower AFQT scores.

Table 4 shows reenlistment rates predicted by the logit equations. These predicted reenlistment rates are for Marines who were average in all characteristics (except AFQT category and the bonus level).³ The predictions show reenlistment rates for AFQT12 Marines with no SRB to be about 4 percentage points lower than the reenlistment rates for other Marines with no SRB. Thus, table 4 shows predicted reenlistment rates for Marines without an SRB of .18 for AFQT12 scorers and .22 for other Marines (AFQT3A-4 scorers). When there is an SRB, differences in the predicted reenlistment rates narrow to 1 percentage point. In brief, the average additional reenlistment impact of the bonus is larger for Marines who score higher on the AFQT.

Table 4 also illustrates the predictions for MOS 0231, Intelligence Specialist. Almost half of the Marines in MOS 0231 making reenlistment decisions in FY 1980 through FY 1990 tested in AFQT category I or II.⁴

1. It is easier to get maximum likelihood techniques to converge if the explanatory variables are all of about the same order of magnitude. Thus, the unemployment rate was divided by 100 ($11.6/100=.116$).

2. The derivative for the SRB-multiple variable (called SRB_LEV) is 0.066.

3. The average bonus level for all reenlistment decisions between FY 1980 and June 1990 was 1.1. The average level for Marines in MOSs that offered an SRB was 2.5.

4. To obtain sufficient numbers of observations for this MOS, all Marines making Zone A reenlistment decisions in this MOS were analyzed (453 Marines).

In this period, SRB levels were 0, 1, 3, 4, and 5. For this MOS, the impact of differential impact of SRBs for AFQT category I and II Marines is much stronger than it is for the entire Marine Corps. Predicted reenlistment rates differ by over 20 percentage points without an SRB, but narrow to only 1 percentage point with positive bonus levels.

**Table 4. Reenlistment rates predicted by logit equations:
The effect of SRBs**

| | | SRB level | | | | | | |
|-------------------------------|--------------|-----------|-----|-----|-----|-----|-----|----------------|
| | | None | 1 | 2 | 3 | 4 | 5 | 6 ^a |
| All observations ^b | | | | | | | | |
| | AFQT12 | .18 | .28 | .35 | .40 | .48 | .50 | .60 |
| | AFQT IIIA-IV | .22 | .29 | .36 | .41 | .49 | .51 | .61 |
| MOS 0231 ^a | | | | | | | | |
| | AFQT12 | .21 | .65 | b | .62 | .58 | .78 | -- |
| | AFQT IIIA-IV | .44 | .64 | b | .61 | .57 | .77 | -- |

- a. No level-six bonuses have been offered by the Marine Corps since 1983, and there were no level-two or level-six SRB levels in MOS 0231 between FY 1980 and FY 1990.
- b. Reenlistment rate predictions hold all characteristics not identified in the table at their average values. The estimates for all observations come from the logit detailed in table E-1 (first column). The logit for Intelligence Specialist (MOS 0231) is detailed in table F-1 (first column).

Predicted Reenlistment Rates by Marital and Dependency Status

Marital and dependency statuses were entered in logit equations with various definitions (the other explanatory variables were identical to those shown in table 3, specification 2). From these estimates, predicted reenlistment probabilities were calculated by grade and marital status. These probabilities, illustrated in table 5, are for Marines who are average in all characteristics except marital status and grade (which are varied in the table). The resulting predicted reenlistment probabilities by marital and dependency statuses reinforce the tabulations by marital/dependency statuses reported earlier in table 2. For example, corporals, average in all characteristics except marital status, are predicted to reenlist at the rate of 26 percent if they are single, at a rate of 43 percent if they are married or have dependents, and at rate of 47 percent if they have two or more dependents.

Table 5. Reenlistment rates predicted from logit equations: The effect of marital/dependency status

| | Grade ^a | | |
|---|--------------------|------|------|
| | LCpl | Cpl | Sgt |
| Average in all characteristics except | | | |
| Single | 0.15 | 0.26 | 0.32 |
| Married | 0.28 | 0.43 | 0.51 |
| Married or with dependents | 0.28 | 0.43 | 0.51 |
| Single with dependents | 0.29 | 0.44 | 0.52 |
| Any marital status; with two or more dependents | 0.32 | 0.47 | 0.55 |

a. The number of E6s was not sufficient (less than 50) for prediction.

DECISIONS IN FY 1988 THROUGH FY 1990

Having reenlistment information for over a decade permits fairly precise estimates of the average effect of changes in the SRB level, the civilian unemployment rate, the pay index, and so forth.¹ Still, to the extent it is possible to isolate any recent deviation in reenlistment behavior from the average behavior over the last decade, it is important to do so. Thus, this section will examine recent patterns, attempting to identify any deviations from average behavior observed during the past decade.

Table 6 details the number and characteristics of recommended and eligible Marines making recent zone A reenlistment decisions. While table 2 presented similar tabulations for a *sample* of decisions from FY 1980 through June 1990, the tabulations in table 6 include *all* zone A FY 1988 through FY 1990 reenlistment decisions for Marines whose initial enlistment contracts were four, five, or six years.² Generally, the

1. Indeed, time periods of one or two years do not provide sufficient variation in some variables--particularly the pay index and the civilian unemployment rate--to permit any estimation of their effects.

2. A small number of records contained implausible data for some of the variables; these records were not included.

relationships among characteristics of Marines and reenlistment propensities in FY 1988 through FY 1990 appear similar to those discussed for the sample of decisions over the last decade.¹

Table 6, however, contains some new information. These are the first years that any sizable number of Marines with five- or six-year contracts are making decisions. Marines with five- or six-year initial enlistment contracts will constitute about one-quarter of FY 1991 and following fiscal years' zone A populations, and it is important to obtain early estimates of any differences in their reenlistment patterns. Table 6 shows substantially higher reenlistment rates for Marines with longer initial contracts.

Additionally, there appears to have been a recent increase in the propensity of high AFQT-scoring Marines to reenlist. FY 1988 illustrates the traditional pattern observed over the decade of the 1980s (slightly lower than average reenlistment rates for AFQT12 scoring Marines (21.0 versus 25.2 percent)). In both 1989 and 1990, however, the reenlistment rates of both AFQT12 and AFQT13A Marines is higher than the overall reenlistment rate. In 1990, for example, the overall reenlistment rate was 24.9 percent, and the reenlistment rate for AFQT12 Marines was 25.7 percent.

Since the first-term attrition rates of Marines who score high on the AFQT is lower than the average attrition rate, these Marines are more likely than average to complete the enlistment term and be part of the population making a reenlistment decision. If, additionally, they continue to reenlist at a higher than average rate, then the proportion of AFQT12 Marines in the second-term will be larger than it was for the original accession cohort. Accession quality is thus of critical importance, shaping the future quality of the career force as well as the quality of the first-term force.

Estimating Reenlistments in FY 1988 Through FY 1990

Table 7 details the reenlistment estimates for the FY 1988 through FY 1990 period. No estimates were made for the current impact of the pay index or the civilian unemployment rate because of insufficient variation in these variables over this short period.

1. The decision to include a separate analysis of recent reenlistment decision was made after the main analytic work was completed. Recent SRB messages have predicated SRB eligibility sometimes on both PMOS and additional MOS (AMOS). Because the basic data were drawn from the ARSTAT file and because this file contains no information on AMOS, the information in table 6 on the number of Marines who were offered SRBs is incomplete. In particular, the table misses Marines who were offered an SRB because of their AMOS. Future work will have to match records to other files to obtain information on each Marine's AMOS.

Table 6. Reenlistment rates, by characteristics of recommended and eligible Marines making Zone A reenlistment decisions in FY 1988, FY 1989, and FY 1990

| Variables | FY 1988 | | FY 1989 | | FY 1990 | |
|---|---------|------------|---------|------------|---------|------------|
| | Number | Reen. rate | Number | Reen. rate | Number | Reen. rate |
| Overall | 19,255 | 25.2 | 16,235 | 27.6 | 15,352 | 24.9 |
| SRB offered | | | | | | |
| No SRB | 8,875 | 14.3 | 8,628 | 25.0 | 13,453 | 21.7 |
| SRB level one | 848 | 32.4 | 3,473 | 22.8 | 390 | 33.6 |
| SRB level two | 4,508 | 28.2 | 1,000 | 33.8 | 223 | 39.5 |
| SRB level three | 1,190 | 36.3 | 1,075 | 34.0 | 274 | 46.0 |
| SRB level four | 3,514 | 41.0 | 1,986 | 40.7 | 722 | 54.2 |
| SRB level five | 320 | 52.8 | 73 | 27.4 | 290 | 56.9 |
| Grade | | | | | | |
| E3 | 5,992 | 23.9 | 3,565 | 20.1 | 3,326 | 21.7 |
| E4 | 11,968 | 25.4 | 11,484 | 28.4 | 10,691 | 24.8 |
| E5/6 | 1,121 | 34.7 | 1,058 | 47.5 | 1,192 | 44.7 |
| Length initial contract | | | | | | |
| Four years | 19,117 | 25.1 | 15,760 | 26.7 | 14,220 | 23.5 |
| Five years | 2 | -- | 43 | 69.8 | 156 | 36.5 |
| Six years | 134 | 41.8 | 432 | 56.3 | 976 | 43.6 |
| Marital/dependency status | | | | | | |
| Not married, no dependents | 11,659 | 20.2 | 9,403 | 20.8 | 8,769 | 18.7 |
| Not married, with dependents | 504 | 32.5 | 482 | 37.8 | 472 | 31.4 |
| Married | 7,092 | 33.1 | 6,350 | 36.8 | 6,111 | 33.3 |
| Either married or with dependents | 7,596 | 33.0 | 6,832 | 36.9 | 6,583 | 33.2 |
| Two or more dependents | 2,476 | 35.9 | 2,615 | 38.9 | 2,583 | 36.6 |
| Other individual background characteristics | | | | | | |
| Male | 18,422 | 24.8 | 15,502 | 27.2 | 14,644 | 24.3 |
| Female | 833 | 35.9 | 733 | 35.2 | 708 | 36.2 |
| Black | 3,192 | 43.0 | 2,907 | 42.7 | 2,601 | 38.4 |
| Hispanic | 968 | 24.7 | 830 | 31.7 | 994 | 23.3 |
| Not black or hispanic | 15,095 | 21.5 | 12,499 | 23.8 | 11,757 | 22.0 |
| HSDG | 17,344 | 25.2 | 14,764 | 27.6 | 14,227 | 24.9 |
| CERT | 1,723 | 26.3 | 1,329 | 29.0 | 1,024 | 26.0 |
| Non-HSDG | 188 | 17.0 | 142 | 13.4 | 101 | 14.9 |
| AFQT 12 | 6,270 | 21.0 | 4,964 | 27.8 | 5,548 | 25.7 |
| AFQT 13A | 10,626 | 22.4 | 8,644 | 27.0 | 9,310 | 25.2 |

Table 7. Logit coefficients and derivatives for reenlistment decisions, FY 1988 through FY 1990

| | Mean value | Specification 1 | | Specification 2 | |
|--|---------------|--------------------|------------|--------------------|------------|
| | | Coefficient | Derivative | Coefficient | Derivative |
| SRB_LEV | 1.04 | .318** (42.3) | .063 | .328** (43.89) | .064 |
| HSDG | .911 | .001 (.04) | .000 | .010 (.27) | .002 |
| AFQT12 | .320 | -.140** (-5.50) | -.028 | -.072** (-2.87) | -.014 |
| Cpl | .658 | .353** (13.64) | .069 | No | -- |
| Sgt/SSgt | .079 | .996** (21.87) | .196 | No | -- |
| Married or dependents | .419 | .711** (33.79) | .140 | .731** (34.93) | .144 |
| Five-year obligor | .004 | .788** (5.09) | .155 | .860** (5.65) | .169 |
| Six-year obligor | .030 | .303** (4.77) | .060 | .752** (13.09) | .148 |
| Prior extension ^a | .040 | .407** (8.10) | .080 | .612** (12.49) | .120 |
| Male | .955 | -.021 (-.45) | -.004 | -.050 (-1.06) | -.010 |
| Black | .176 | .903** (34.19) | .177 | .866** (33.04) | .170 |
| Hispanic | .055 | .207** (4.53) | .041 | .199** (4.38) | .039 |
| Number of observations ^b | | 53,919 | | 53,919 | |
| Chi-square | | 6,996.4 | | 6,498.4 | |

Table 7. (Continued)

NOTE: (1) Number in parentheses beneath coefficients are t-statistics.
(2) ** Statistical significance at the 1-percent level.

(3) Logit equations also contained fiscal year indicator, missing AFQT score indicator, and MOS category variables.

- a. All extensions before the reenlistment decision were made by Marines with initial obligations of four years.
 - b. This data set contains all zone A decisions for Marines with initial obligations of four, five, or six years. A small number of observations with missing or implausible data were dropped from the analysis.
-

The strong reenlistment incentives provided by SRB bonus multiples are again shown in table 7. Estimated derivatives show that each unit increment in the bonus level is associated with an increase in the reenlistment rate of about 6 percentage points.

The next two variables (HSDG and AFQT12) showed statistically significant negative impacts--other things equal--on reenlistment probabilities in the 1980s; the magnitudes were about 3 and 5 percentage points, respectively (see table 3). Holding "everything else equal," however, is probably not particularly meaningful for these particular characteristics.¹ For example, Marines who are high test scorers are more likely to be in higher grades and in longer enlistment contracts, characteristics that are both associated with higher reenlistment propensities. Table 2, in fact, showed average reenlistment rates over the decade of the 1980s of 30.5 percent for AFQT12 Marines and 31.1 for HSDG Marines (versus 32.4 percent for the overall sample). These differences in average reenlistment rates are considerably smaller than the differences "everything else equal."

Data in table 6 showed that in FY 1989 and FY 1990 the reenlistment rate of AFQT12 Marines was actually slightly higher than average. The estimation results in table 7 for these recent reenlistment decisions show the variable HSDG is no longer statistically significant. The impact of the AFQT12 variable, although still statistically significant, is smaller than it was in an earlier period. Thus, holding all other characteristics constant, Marines scoring in categories I and II of the AFQT are still somewhat less likely to reenlist than lower scoring Marines. Given the average characteristics of AFQT12 Marines, however,

1. For example, holding all other variables constant (other things equal) looks at the effect of AFQT12 Marines within grade, length of initial contract, etc.

AFQT12 Marines are now slightly more likely to reenlist than are Marines scoring lower on the AFQT.

Marines who are married or who have dependents are also still considerably more likely to reenlist than are single Marines without dependents.¹ In the current period it is not nearly as common to execute an extension before the final decision to reenlist or to separate from the Marine Corps. Those who do first execute an extension, however, still seem to be signaling more positive reenlistment propensities than those who have not yet made any decision.

Both specifications in table 7 include indicator variables for five- and six-year initial obligations; the two specifications in the table differ because the second specification excludes separate variables for grade (longer initial obligations imply a higher grade at the decision point.) Considering the grade at which Marines make their decision (the first specification), five-year obligors are considerably more likely, and six-year obligors more likely, to reenlist than four-year obligors. When grade is omitted (the second specification) and the initial enlistment length (as well as the other variables in the equation that predict grade--AFQT category, MOS group, etc.) is allowed to proxy the effects of grade, both five- and six-year obligors are considerably more likely to reenlist than are Marines with initial obligations of four years.²

Overall, the Marine Corps should expect that these longer obligations increase the probabilities of reenlistment. These longer initial enlistments also increase the probability that zone A reenlisters will be married³ and in higher grades when they make their reenlistment decision.

Table 8 provides additional information about FY 1989 and FY 1990 decisions for Marines of different initial contract lengths. For this period, there are large differences in reenlistment rates by length of initial contract. There are also sharp differences in the proportion married. Most of this difference in the marriage rate at the reenlistment point is due to age differences (for example, six-year personnel were 25.6 years of age at the decision point, while four-year personnel

1. The specifications in table 7 identify these effects by the variable "married or dependents." Other logit equations, not reproduced in the paper, used all the variable definitions reported in table 5. Results for the current period are virtually identical to those found for the entire decade.

2. Both the five- and six-year obligor variables need to be interpreted in relation to the omitted group, four-year obligors.

3. Forthcoming work will attempt to examine all dimensions of initial enlistment contract lengths--recruitment and training costs, first-term attrition, reenlistment behavior, etc.

Table 8. First-term recommended and eligible population: statistics, by length of initial contract for FY 1989 and FY 1990

| | FY 1990 | | | | FY 1989 | | | |
|--|---------|--------|--------|---------------|---------|--------|--------|---------------|
| | 4-year | 5-year | 6-year | 5- and 6-year | 4-year | 5-year | 6-year | 5- and 6-year |
| Reenlistment percent | 23.5 | 36.5 | 43.6 | 42.6 | 26.7 | 69.8 | 56.3 | 57.5 |
| Percent of recommended and eligible population that were | | | | | | | | |
| Married | 38.5 | 49.4 | 56.9 | 55.8 | 38.5 | 60.5 | 57.9 | 58.1 |
| Rank | | | | | | | | |
| LCpl | 23.4 | 13.5 | 1.9 | 3.4 | 22.8 | -- | 1.4 | 1.3 |
| Cpl | 73.6 | 71.0 | 21.9 | 28.7 | 72.6 | 79.1 | 22.7 | 27.8 |
| Sgt | 3.0 | 14.5 | 76.2 | 67.9 | 4.6 | 20.9 | 75.9 | 70.9 |
| AFQT category I-II | 32.4 | 48.1 | 89.5 | 71.1 | 29.0 | 41.9 | 88.9 | 84.6 |
| AFQT category I-IIIa | 58.0 | 69.2 | 97.5 | 79.6 | 52.1 | 58.1 | 96.1 | 92.6 |
| Number of Marines ^a | 14,220 | 156 | 976 | 1,332 | 15,633 | 43 | 432 | 474 |

a. Includes all recommended and eligible Zone A decisions for Marines with initial contracts of four, five, and six years. In FY 1990, five Marines (in FY 1989, six Marines) made their reenlistment decisions at the grade of SSgt; they were grouped with Sgts in the table.

were 23.6 years); since a six-year contract is two years longer than a four-year contract, these age differences (and thus the differences in the marriage rate) can be expected to persist.

The current sharp differences in grade at the first reenlistment point (the majority of four-year obligors are corporals, and the majority of six-year obligors are sergeants) probably will be reduced in the future because of changes in Marine Corps promotion policy. Since grade is such an important determinant of reenlistment probability, a reduction in the 20-percentage point difference in reenlistment rates for Marines with four-year versus five- or six-year initial contracts should be anticipated.

Finally, table 8 shows sharp differences between Marines with different obligation lengths in the proportion who test in AFQT categories I and II. Since AFQT scores are known at accession, future differences in AFQT scores at the first-term reenlistment point can be estimated with reasonable precision.¹ An examination of AFQT category and contract length for accessions since FY 1985 shows that there will continue to be large differences in the proportion of AFQT category I and II Marines represented in the different contract length populations. However, the differences will not be quite as dramatic as those shown in table 8.

OUT-YEAR VERSUS IN-YEAR REENLISTMENTS

Two separate analyses were undertaken to examine possible differences in responses for out-year versus in-year reenlistments. The first analysis restricted the sample to reenlistments and estimated the probability that the reenlistment would be out-year. Thus, this analysis examines the *timing* of reenlistments. The second analysis dropped any out-year reenlisters from the data set and estimated the probability of reenlistment (reenlist within fiscal year or separate). The analyses were restricted to FY 1989 decisions, because historical information on policies regarding early reenlistment was not available.² Appendix G contains these estimates.

The basic findings for the first analysis are that Marines with longer initial contracts and high AFQT scores are more likely to be out-year reenlisters than in-year reenlisters. Higher SRB levels induce

1. They cannot be estimated exactly because the recommended and eligible population at the reenlistment point is a subset of the accession population four to six years earlier.

2. FY 1990 decisions were not analyzed because they may have been affected by Operation Desert Shield, which began on 8 August 1990. Since out-year reenlistments are more likely at the end of the fiscal year, any change in behavior because of the operation could skew the relationships among out-year versus in-year reenlistments for FY 1990.

out-year reenlistments. Additionally, proportionally fewer of the reenlistments for black Marines are out-year than for the other racial/ethnic groups. For other characteristics, in FY 1989 at least, Marines appear to reenlist in roughly the same mix of out-year and in-year reenlistments as is average for the Corps.¹

The second analysis omitted out-year reenlistments, estimating for FY 1989 decisions the probability of an in-year reenlistment (versus a separation). This examination shows that the reenlistment inducements provided by SRBs are much smaller for in-year reenlistments than they are for all reenlistments. These findings suggest considerable caution in utilizing estimates for SRBs derived from all reenlistments to predict the impact of SRBs on in-year reenlistments. Higher SRB levels are considerably more powerful in buying the Marine Corps additional out-year reenlistments than they are for buying additional in-year reenlistments. If planners are required to predict in-year reenlistments accurately, additional work on modeling in-year reenlistments may be warranted. In particular, other things equal, if there are large numbers of out-year reenlistments in one particular year, the number of in-year reenlistments the next year will be smaller. In brief, future work should explicitly address how the number of out-year reenlistments last year affects the number of in-year reenlistments this year.

SUMMARY AND CONCLUSIONS

This paper has analyzed Zone A reenlistment decisions by "recommended and eligible" Marines in the 1980s. During the decade, the characteristics of Marines making this reenlistment decision have changed substantially. In particular, recommended and eligible Marines currently making the decision are more likely to be (1) higher test scorers and better educated, (2) married or with dependents, (3) at a lower grade, and (4) finishing longer initial contracts than were comparable Marines in the early 1980s. One important objective of this study was to quantify differences in reenlistment behavior related to these differences in characteristics.

Reenlistment probability was estimated as a function of the SRB bonus multiple, grade, background characteristics, the length of the initial contract, whether or not an extension was executed immediately before the decision, the MOS group, a civilian-to-military pay index, and the civilian unemployment rate. The estimating equations fit the data extremely well, and coefficient estimates achieved high levels of statistical significance.

1. The patterns of out-year reenlistments by grade are quite complex. First, early reenlisters, holding initial contract length constant, have been in the Marine Corps a shorter period of time when they reenlist. Second, Marines with longer initial enlistment contracts are more likely to reenlist out-year.

Overall, the results suggest that higher SRBs, higher grade, and longer initial enlistments are associated with higher reenlistment rates. Additionally, females, blacks, and married individuals are more likely to reenlist than other groups. Higher SRB levels appear to affect both the quantity and the quality of reenlistments as higher SRB levels appear particularly attractive to high quality Marines, thereby inducing disproportionate numbers of reenlistments from this group.

In each year of the 1980s, reenlistment rates were sharply delineated by grade, with the lowest rates for lance corporals and the highest rates for sergeants/staff sergeants. Over the decade, however, as promotion rates slowed, there were some changes in the reenlistment rates by grade. Although the reenlistment rates by grade increased for all grades, the increase in the lance corporal reenlistment rate was the largest. Presumably, making the reenlistment decision at the grade of lance corporal at the end of the decade had a more positive connotation about a successful first term of service than it had had at the beginning of the decade.

The relationship between AFQT score categories at accession and after the first reenlistment is a subject of considerable interest. The 1980s saw substantial increases in the proportion of Marine Corps accessions with high AFQT scores. These Marines with high test scores have lower first-term attrition and are thus more likely to be in the population of recommended and eligible Marines making reenlistment decisions. While most of the decade saw slightly lower than average reenlistment rates among AFQT category I-II Marines, the reenlistment rates in FY 1989 and FY 1990 of these Marines with very high test scores was higher than average. The last big increase in accession quality was in FY 1986, and it is these Marines that are now making reenlistment decisions. It appears that the Marine Corps investments in improving accession quality are paying off in higher retention as well as in better performance and lower first-term attrition.

While the Marine Corps can use its SRB budget to channel reenlistments to required personnel, it has considerably less ability to manipulate the relationship of military to civilian pay or the civilian unemployment rate. Yet, both of these factors have played important roles in the reenlistment equation, particularly in the early 1980s. A 1-percentage point increase in the CNA-constructed pay index for first-term personnel was associated with a 0.6-percentage point increase in the reenlistment rate. Similarly, a 1-percentage point increase in the 20- to 24-year-old male unemployment rate (a fairly small historical change) was associated with a 0.6-percentage point increase in the Marine Corps reenlistment rate.

Further analysis partitioned reenlistment decisions into those made before the fiscal year of contract expiration (out-year reenlistments) and those made in-year. It is especially important that Marine Corps planners project in-year reenlistments accurately, as these in-year

reenlistments directly affect year-end strength. Findings suggest that in-year reenlistments are not quite as responsive to SRBs as are out-year reenlistments. Additional work on the determinants of in-year reenlistments may be warranted.

Finally, during the course of the study, a permanent longitudinal decision database was constructed. Additionally, computer programs to extract desired decisions were finalized. Thus, future retention analyses can extract decisions, and the background information on Marines making these decisions, in a time frame that lags real-time decisions by only about three months.

REFERENCES

- [1] CNA Research Contribution 326, *Profile of a Successful Marine*, by William H. Sims, Sep 1977
- [2] CNA Research Memorandum 89-314, *Identifying Successful Marine Corps Recruits*, by Aline O. Quester, James H. North, and Theresa H. Kimble, Apr 1990
- [3] CNA Research Memorandum 90-62, *Length of Time in Delayed-Entry Program and Its Effect on Marine Corp First-Term Survival*, by James H. North, Sep 1990
- [4] CNA Research Memorandum 90-182, *Validation of ASVAB Against Infantry Job Performance*, by Paul W. Mayberry, Dec 1990
- [5] CNA Research Memorandum 91-53, *Marriage and Dependency Rates for Enlisted Marines* by Adebayo Adedeji, forthcoming
- [6] CNA Research Memorandum 91-160, *Time in Grade: A Historical Summary for Enlisted Marine Corps Promotions From FY 1979 Through FY 1990*, by Greg W. Steadman and Aline O. Quester, forthcoming
- [7] CNA Information Memorandum 127, *CNA's Longitudinal ARSTAT Tracking Files for Enlisted Marines*, by Greg W. Steadman, Apr 1991
- [8] Rand Corporation, R-1935-ARPA, *Reenlistment Bonuses and First-Term Retention*, by John H. Enns, Sep 1977
- [9] CNA Research Contribution 476, *Determinants of Navy Reenlistment and Extension Rates*, by Matthew S. Goldberg and John T. Warner, Dec 1982
- [10] CNA Research Memorandum 87-43, *The Effects of Selective Reenlistment Bonuses on Retention*, by Donald J. Cymrot, Mar 1987
- [11] CNA Report 138, *The Retention Effects of Selective Reenlistment Bonuses in the United States Marine Corps*, by Donald J. Cymrot, Aug 1987
- [12] Department of Defense, Office of the Secretary of Defense, *Military Compensation Background Papers: Compensation Elements and their Related Manpower Costs*, 3rd ed. Chapter II, p. 35, Jun 1987
- [13] United States Department of Labor, Bureau of Labor Statistics, *News: Weekly Earnings of Wage and Salary Workers*, published quarterly, various issues

APPENDIX A

VARIABLES ON THE RETENTION DATABASE

APPENDIX A

VARIABLES ON THE RETENTION DATABASE

This appendix describes the variables on the retention database in more detail than is provided in the main text.

Figure A-1 illustrates the process by which the data were prepared. To facilitate future analysis, the data were prepared generically; only on the final computer programs are the data restricted to zone A decisions. There are three computer programs (shown as rectangles on the figure). In turn, these programs

- Append correctly normed AFQT scores to the data
- Construct a retention database organized around decisions (reenlistments, effective extensions, and separations)
- Extract records for zone A decisions of reenlistments, extensions of one year or longer, and separations of Marines recommended and eligible for reenlistment, and append additional information to the record.

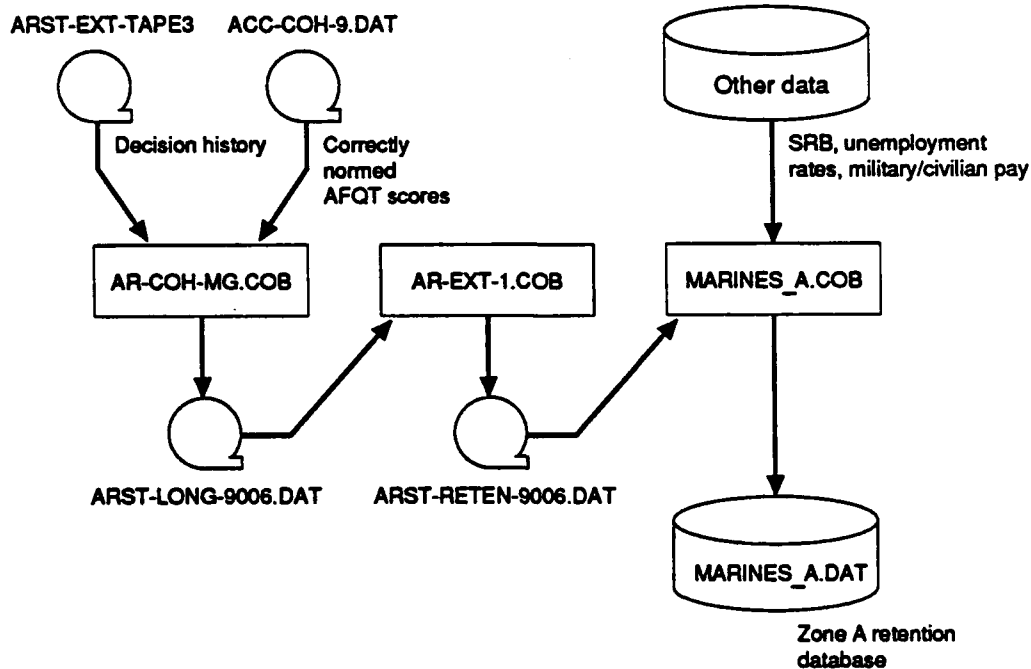


Figure A-1. Flow diagram describing construction of zone A retention database

The first step was to append correctly calibrated AFQT scores to the ARSTAT longitudinal tracking file because the AFQT score recorded on the Marine's personnel records may be misnormed.¹ Previous work had derived accurate AFQT categories for accessions since FY 1978, and thus the first step was to match this accession cohort file to the longitudinal ARSTAT Tracking file and append correctly normed AFQT score categories to the longitudinal histories. (The resulting data set is called ARST-LONG-9006.DAT on figure A-1.)²

The next step was the construction of a retention database (called ARST-RETEN-9006.DAT and stored on computer tape). This database integrates historical information from the individuals' ARSTAT longitudinal history to a reenlistment, extension, or leave decision. This database will be permanently maintained by CNA and should form the basis for future retention analysis.

A particular Marine may have more than one record in this database, since each observation is a decision. For each decision, the following information is either extracted or constructed from the individual's ARSTAT longitudinal record:

- Background

- SSN
- Gender
- Race/ethnic background
- AFQT score category
- Education (years and category)
- Armed Forces Active Duty Base Date

1. There have been several problems historically with incorrectly calibrated AFQT scores. CNA has done extensive work with AFQT norming and has developed algorithms to place individuals in the correct AFQT categories. (See conversion tables in Department of Defense, DOD 1304.12WI, *Conversion Tables Armed Services Vocational Aptitude Battery*, Jan 1989.) Considerable information is required to calculate accurate scores (the test date, the ASVAB battery, raw scores, etc.) and for accessions before the late 1970s, and it is generally not possible to calculate accurate scores.

2. For accessions before FY 1978, and for some accessions since FY 1978 with incomplete information, correctly normed AFQT score categories are missing. Rather than use inaccurate scores, the analysis will explicitly recognize the missing information and statistically control for it.

- Information at decision point

- Decision type (reenlistment; extension; separation, eligible at EAS; separation, ineligible at EAS; separation, eligible and not at EAS; separation, ineligible and not at EAS; broken reenlistment)
- Component code
- Age
- Marital and dependent statuses
- MCC and RUC
- PMOS
- Present grade
- Time spent in present grade
- Decision date
- Months of service at decision
- Number of extensions immediately before reenlistment, extension, or separation
- Length of all extensions before this contract
- Length of prior enlistment contract
- End of active service (EAS) date on prior contract
- Months between EAS on prior contract and decision date
- Flag if decision fiscal year is before the fiscal year of the EAS for the prior contract
- For broken reenlistment, number of months between separation and reentry

- Characteristics of decision

- Length of reenlistment or extension
- Separation designator number (SDN) for separation

- Longitudinal history of grade changes

- Months to promotion (E2-E3, E3-E4, E4-E5, E5-E6)
- Demotions total
- Number of demotions in the 12 months before the particular decision.

The final step was to extract zone A decisions (to reenlist, to extend for at least one year, or to separate with a status of recommended and eligible for reenlistment) from the retention database. Additionally, this computer program appended information that characterized the environment at the time the Marine made the reenlistment decision--the level of the Selective Reenlistment Bonus (SRB) for the Marine's PMOS at the decision, the civilian unemployment rate for 20- to 24-year-old males, and an index of military-to-civilian pay. Because CNA has been unable to locate information on SRB bonus multiples for either FY 1978 or FY 1979, the Zone A reenlistment database begins in FY 1980.

APPENDIX B

PRIMARY MILITARY OCCUPATIONAL SPECIALTY CODES

APPENDIX B

PRIMARY MILITARY OCCUPATIONAL SPECIALTY CODES

This appendix provides two tables. Table B-1 is the grouping of PMOSs into the categories used in the logit retention equations. Table B-2 is a listing, by PMOS, of the numbers of decisions for the random sample in the FY 1980 through June 1990 period (26,840 decisions).

Table B-1. PMOS categories

| INFANTRY | | AIRMAN (Air Mechanical Fixed-wing) | |
|--|--|---|--|
| 0300 BASIC INFANTRY MAN | | 0000 BASIC AIRCRAFT MAINTENANCE MARINE | |
| 0311 RIFLEMAN | | 0011 AIRCRAFT MECHANIC—TRAINEE | |
| 0313 LAV CREWMAN | | 0012 AIRCRAFT MECHANIC A-4/TA-4/OA-4 | |
| 0321 RECONNAISSANCE MAN | | 0013 AIRCRAFT MECHANIC A-6/EA-6 | |
| 0331 MACHINEGUNNER | | 0014 AIRCRAFT MECHANIC F-4/RF-4 | |
| 0332 GUNNER HEAVY MACHINEGUN | | 0015 AIRCRAFT MECHANIC AV-8/TA-8 | |
| 0341 MORTARMAN | | 0016 AIRCRAFT MECHANIC KC-130 | |
| 0351 ASSAULTMAN | | 0017 AIRCRAFT MECHANIC F/A-18 | |
| 0352 ANTITANK ASSAULT GUIDED MISSILEMAN | | 0018 AIRCRAFT MECHANIC OV-10 | |
| 0369 INFANTRY UNIT LEADER | | 0019 AIRCRAFT MAINTENANCE CHIEF | |
| 0800 BASIC FIELD ARTILLERY MAN | | 0022 AIRCRAFT POWER PLANTS MECHANIC J-52 | |
| 0811 FIELD ARTILLERY CANNONER | | 0023 AIRCRAFT POWER PLANTS MECHANIC I-76 | |
| 0812 FIELD ARTILLERY NUCLEAR PROJECTILEMAN | | 0024 AIRCRAFT POWER PLANTS MECHANIC J-70 | |
| 0842 FIELD ARTILLERY RADAR OPERATOR | | 0025 AIRCRAFT POWER PLANTS MECHANIC ROLLS ROYCE PEGASUS | |
| 0844 FIELD ARTILLERY FIRE CONTROL MAN | | 0026 AIRCRAFT POWER PLANTS MECHANIC T-56 | |
| 0847 ARTILLERY METEOROLOGICAL MAN | | 0027 AIRCRAFT POWER PLANTS MECHANIC F-404 | |
| 0848 FIELD ARTILLERY OPERATIONS MAN | | 0031 AIRCRAFT FLIGHT ENGINEER KC-130 TRAINEE | |
| 0861 FIRE SUPPORT MAN | | 0032 AIRCRAFT FLIGHT ENGINEER KC-130 | |
| 1800 BASIC TANK AND ASSAULT AMPHIBIAN CREWMAN | | 0035 AIRCRAFT POWER PLANT TEST CELL OPER FWD WING | |
| 1811 M60A1 TANK CREWMAN | | 0043 AIRCRAFT WELDER | |
| 1812 M1A1 TANK CREWMAN | | 0044 AIRCRAFT NON-DESTRUCTIVE INSPECTION TECH | |
| 1833 ASSAULT AMPHIBIAN CREWMAN | | 0046 AIRCRAFT MAINTENANCE ADMIN CLERK | |
| 9952 SCUBA MARINE (OFFICER/ENLISTED) (OFF:2E) | | 0047 AIRCRAFT MAINTENANCE DATA ANALYSIS TECH | |
| 9953 PARACHUTIST/SCUBA MARINE (OFFICER:2E/ENLISTED) | | 0051 AIRCRAFT HYDRAULIC/PNEUMATIC MECH-TRAINEE | |
| 9956 GROUND SAFETY SPECIALIST (OFFICER:4J/ENLISTED) | | 0052 AIRCRAFT HYDRAULIC/PNEUMATIC MECH 4-A/TA-4/OA-4 | |
| | | 0053 AIRCRAFT HYDRAULIC/PNEUMATIC MECH A-6/EA-6 | |
| | | 0054 AIRCRAFT HYDRAULIC/PNEUMATIC MECH F-4/RF-4 | |
| | | 0055 AIRCRAFT HYDRAULIC/PNEUMATIC MECH AV-8/TA-8 | |
| | | 0056 AIRCRAFT HYDRAULIC/PNEUMATIC MECH KC-130 | |
| AIRMAN (Air Mechanical helos) | | | |
| 6111 HELICOPTER MECHANIC—TRAINEE | | 6057 AIRCRAFT HYDRAULIC/PNEUMATIC MECH F/A-18 | |
| 6112 HELICOPTER MECHANIC CH-46 | | 6058 AIRCRAFT HYDRAULIC/PNEUMATIC MECH OV-10 | |
| 6113 HELICOPTER MECHANIC CH-53 | | 6059 AIRCRAFT AIRFRAMES MAINT CHIEF | |
| 6114 HELICOPTER MECHANIC UH-1 | | 6060 FLIGHT EQUIP MARINE | |
| 6115 HELICOPTER MECHANIC CH-53E | | 6071 AIRCRAFT MAINT GRND SUPT EQUIP MECHN TRNEE | |
| 6119 HELICOPTER MAINTENANCE CHIEF | | 6072 AIRCRAFT MAINT GSE/HYDRLC/PNEUMATIC/STRUC/MECHANIC | |
| 6122 HELICOPTER POWER PLANTS MECHANIC T-50 | | 6073 AIRCRAFT MAINT GSE ELECT/REFRIGERATION MECHANIC | |
| 6123 HELICOPTER POWER PLANTS MECHANIC T-64 | | 6075 CRYOGENICS EQUIP OPERATOR | |
| 6125 HELICOPTER POWER PLANTS MECHANIC T-400 | | 6081 AIRCRAFT SAFETY EQUIP MECHANIC—TRAINEE | |
| 6132 HELICOPTER DYNAMIC COMPONENTS MECHANIC | | 6082 AIRCRAFT SAFETY EQUIP MECHANIC A-4/TA-4/OA-4 | |
| 6135 AIRCRAFT POWER PLANT TEST CELL OPER ROTARY WING | | 6083 AIRCRAFT SAFETY EQUIP MECHANIC A-6/EA-6 | |
| 6142 HELICOPTER STRUCTURES MECHANIC CH-46 | | 6084 AIRCRAFT SAFETY EQUIP MECHANIC F-4/RF-4 | |
| 6143 HELICOPTER STRUCTURES MECHANIC CH-53 | | 6085 AIRCRAFT SAFETY EQUIP MECHANIC AV-8/TA-8 | |
| 6144 HELICOPTER STRUCTURES MECHANIC UH-1 | | 6086 AIRCRAFT SAFETY EQUIP MECHANIC KC-130 | |
| 6152 HELICOPTER HYDRAULIC/PNEUMATIC MECHANIC CH-46 | | 6087 AIRCRAFT SAFETY EQUIP MECHANIC F/A-18 | |
| 6153 HELICOPTER HYDRAULIC/PNEUMATIC MECHANIC CH-53 | | 6088 AIRCRAFT SAFETY EQUIP MECHANIC OV-10 | |
| 6154 HELICOPTER HYDRAULIC/PNEUMATIC MECHANIC UH-1 | | 6089 AIRCRAFT SAFETY EQUIP CHIEF | |
| 6155 HELICOPTER HYDRAULIC/PNEUMATIC MECHANIC CH-53E | | 6091 AIRCRAFT STRUCTURES MECHANIC—TRAINEE | |
| 6159 HELICOPTER AIRFRAMES MAINT CHIEF | | 6092 AIRCRAFT STRUCTURES MECHANIC A-4/TA-4/OA-4 | |
| 6162 PRESIDENTIAL SUPPORT SPECIALIST | | 6093 AIRCRAFT STRUCTURES MECHANIC A-6/EA-6 | |
| 6173 HELICOPTER CREW CHIEF CH-46 | | 6094 AIRCRAFT STRUCTURES MECHANIC F-4/RF-4 | |
| 6174 HELICOPTER CREW CHIEF CH-53 A/D | | 6095 AIRCRAFT STRUCTURES MECHANIC AV-8/TA-8 | |
| 6175 HELICOPTER CREW CHIEF UH-1N | | 6096 AIRCRAFT STRUCTURES MECHANIC KC-130 | |
| 6176 HELICOPTER CREW CHIEF V-22 | | 6097 AIRCRAFT STRUCTURES MECHANIC F/A-18 | |
| | | 6098 AIRCRAFT STRUCTURES MECHANIC OV-10 | |

Table B-1. (Continued)

| AIRTECH | | | |
|---------|---|------|--|
| 6300 | BASIC AVIONICS MARINE | 2821 | COMPUTER TECHNICIAN |
| 6311 | AIRCRAFT COM/NAVIG/ELEC/WEAP/SYS/TECH-IRNE OMA | 2822 | ELECTRONIC SWITCHING EQUIP TECH |
| 6312 | AIRCRAFT COM/NAVIG SYS TECH A-4/TA-4/OA-4 | 2823 | TECHNICAL CONTROLLER |
| 6313 | AIRCRAFT COM/NAVIG/RADAR SYS TECH A-6/EA-6A | 2824 | MICROCOMPUTER REPAIRER |
| 6314 | AIRCRAFT COM/NAVIG SYS TECH RF-4/F4 | 2826 | AN/MSC-63A MAINTENANCE TECHNICIAN |
| 6315 | AIRCRAFT COM/NAVIG SYS TECH AV-8 | 2827 | MOBILE DATA TERMINAL TECH |
| 6316 | AIRCRAFT COM/NAVIG SYS TECH KC-130 | 2829 | MOBILE COMM CENTRAL TECH |
| 6317 | AIRCRAFT COM/NAVIG/WEAP/SYS/TECH F/A-18 | 2831 | MICROWAVE EQUIP TECH |
| 6318 | AIRCRAFT COM/NAVIG/ELEC/WEAP/SYS/TECH OV-10 | 2833 | FLEET SATELLITE TERMINAL TECH |
| 6322 | AIRCRAFT COM/NAVIG/ELEC SYS TECH CH-46 | 2834 | GROUND MOBILE FORCES SATCOM TECH |
| 6323 | AIRCRAFT COM/NAVIG/ELEC SYS TECH CH-53 | 2841 | GROUND RADIO REPAIRER |
| 6324 | AIRCRAFT COM/NAVIG/ELEC/WEAP SYS TECH U/AI-1 | 2842 | PLRS MAINTENANCE TECH |
| 6325 | AIRCRAFT COM/NAVIG/ELEC/WEAP SYS TECH V-22 | 2843 | PLRS SUPPORT MAINTENANCE TECH |
| 6331 | AIRCRAFT ELEC SYS TECH-IRAINEE | 2861 | RADIO TECHNICIAN |
| 6333 | AIRCRAFT ELEC SYS TECH A-6/EA-6 | 2867 | AN/ISC-95 RADIO TECH |
| 6335 | AIRCRAFT ELEC SYS TECH AV-8 | 2871 | 1ST MEASUREMENT & DIAGNOSTIC EQUIP TECH |
| 6336 | AIRCRAFT ELEC SYS TECH KC-130 | 2874 | METROLOGY TECH |
| 6337 | AIRCRAFT ELEC SYS TECH F/A-18 | 2877 | RADAR INSTRUMENT TECH |
| 6353 | AIRCRAFT WEAP SYS SPECIALIST A-6/FC-4C | 2881 | COMM SECURITY EQUIP TECH |
| 6354 | AIRCRAFT WEAP SYS SPECIALIST F-4S | 2884 | GROUND RADAR REPAIRER |
| 6363 | AIRCRAFT RADAR RECON/CAURA SYS TECH RF-4B | 2885 | ARTILLERY ELECTRONIC SYSTEMS REPAIRER |
| 6386 | AIRCRAFT ELEC COUNNER SYS TECH EA-6B | 2887 | COUNTER MORIAR RADAR REPAIRER |
| 6391 | AVIONICS MAINTENANCE CHIEF | 2889 | GROUND RADAR TECHNICIAN |
| 6404 | ADVC AIRCRAFT ELEC/INSIR/FLIGHT CNTRL SYS TECH IMA | 2891 | DATA/COMM MAINTENANCE CHIEF |
| 6411 | AIRCRAFT COM/NAVIG SYS TECH-IRNEE IMA | 5900 | BASIC ELECTRONICS MAINTENANCE MARINE |
| 6412 | AIRCRAFT COM SYS TECH IMA | 5911 | MICROMINIATURE CIRCUIT REPAIR SPECIALIST |
| 6413 | AIRCRAFT NAVG SYS TECH IFT/RADAR/TACAN IMA | 5921 | HAWK FIRE CONTROL REPAIRER |
| 6414 | ADV AIRCRAFT COM/NAVIG SYS TECH IMA | 5922 | HAWK INFORMATION COORDINATION CENTRAL REPAIRER |
| 6422 | AIRCRAFT CRYPTOGRAPHIC SYS TECH IMA | 5923 | HAWK FIRING SECTION REPAIRER |
| 6423 | AVIA ELEC MICRO-MINIR/INSIR & CABLE REPAIR TECH | 5924 | HAWK PULSE RADAR TECHNICIAN |
| 6431 | AIRCRAFT ELEC SYS TECH-IRNEE | 5925 | HAWK CONTINUOUS WAVE RADAR TECHNICIAN |
| 6432 | AIRCRAFT ELEC/INSIR/FLT CRTL SYS TECH FX WING IMA | 5927 | HAWK FIRE CONTROL TECHNICIAN |
| 6433 | AIRCRAFT ELEC/INSIR/FLT CRTL SYS TECH HELCP/AV 10 IMA | 5928 | HAWK MISSILE SYSTEM MAINTENANCE TECHNICIAN |
| 6434 | ADVD AIRCRAFT ELEC/INSIR/FLT CRTL SYS TECH IMA | 5929 | HAWK MECHANICAL SYSTEM REPAIR |
| 6463 | RADAR 1ST STA(RTS)/RADAR SYS 1ST STA(RSTS)TECH IMA | 5937 | AVIATION RADIO REPAIRER |
| 6464 | AIRCRAFT INERTIAL NAVG SYS TECH IMA | 5938 | AVIATION METEOROLOGICAL EQUIPMENT TECHNICIAN |
| 6465 | HYBRID TEST SET TECH IMA | 5939 | AVIATION RADIO TECHNICIAN |
| 6466 | AIRCRAFT FWD LOOKING INFRARED/ELEC-OPTICAL TECH IMA | 5942 | AVIATION RADAR REPAIRER (AN/IPS-59) |
| 6468 | AIRCRAFT ELEC EQUIP 1ST SET/ABL ELEC 1ST SET TECH IMA | 5943 | AVIATION FIRE CONTROL REPAIRER |
| 6469 | ADVIC AUTOMATIC TEST EQUIP TECH IMA | 5944 | AVIATION RADAR REPAIRER (AN/IPS-63) |
| 6474 | AIRCRAFT WEAPONS SYS TECH AWC-10 IMA | 5945 | AVIATION RADAR REPAIRER (AN/IPS-32) |
| 6475 | AIRCRAFT RADAR/IR RECONNAISSANCE SYS TECH IMA | 5947 | AVIATION FIRE CONTROL TECHNICIAN |
| 6478 | AERIAL CAMERA/ADAS SYS TECH IMA | 5948 | AVIATION RADAR TECHNICIAN |
| 6482 | ADVIC AIRCRAFT WEAPONS SYS TECH IMA | 5952 | AIR TRAFFIC CONTROL NAVIGATIONAL AIDS TECHNICIAN |
| 6483 | AIRCRAFT ELEC COUNTERMEASURE SYS TECH FIXED WINGS IMA | 5953 | AIR TRAFFIC CONTROL RADAR TECHNICIAN |
| 6484 | AIRCRAFT ELEC COUNTERMEASURE SYS TECH HELICOPTER IMA | 5954 | AIR TRAFFIC CONTROL COMM TECHNICIAN |
| 6485 | ADVND AIRCRAFT ELEC COUNTERMEASURE TECH IMA | 5959 | AIR TRAFFIC CONTROL SYSTEM MAINTENANCE CHIEF |
| 6492 | AVIATION PME/ATE CALIBRATION & REPAIR TECH | 5962 | TACTICAL AIR COMMAND CENTRAL REPAIRER |
| 2890 | BASIC DATA/COMM MAINTENANCE MARINE | 5963 | TACTICAL AIR OPERATIONS CENTRAL REPAIRER |
| 2811 | TELEPHONE TECH | 5964 | TACTICAL DATA COMMUNICATIONS CENTRAL REPAIRER |
| 2813 | CABLE SYSTEMS TECH | 5974 | TACTICAL AIR COMMAND CENTRAL TECHNICIAN |
| 2810 | TELETYPE & TACTICAL OFC MACHINE TECH | 5977 | TACTICAL GENERAL PURPOSE COMPUTER TECHNICIAN |
| | | 5978 | TACTICAL DATA COMMUNICATIONS CENTRAL TECHNICIAN |
| | | 5979 | TACTICAL AIR OPERATIONS CENTRAL TECHNICIAN |
| | | 5982 | COMP SYS TECH HOKEYWELL DPS-6 (AN/UYK-65V)) SYS |
| | | 5983 | ELECTRONICS MAINTENANCE CHIEF |
| | | 5994 | TACTICAL DATA SYSTEMS MAINTENANCE CHIEF |

Table B-1. (Continued)

OIHAI (Other Air)

6500 BASIC AVIATION ORDNANCE MARINE
 6511 AVIATION ORDNANCE TRAINEE
 6521 AVIATION ORDNANCE MUNITIONS TECHNICIAN
 6531 AIRCRAFT ORDNANCE TECHNICIAN
 6541 AVIATION ORDNANCE EQUIPMENT REPAIR TECHNICIAN
 6561 MARINE WING WEAPONS UNIT SPECIALIST
 6591 AVIATION ORDNANCE CHIEF
 6800 BASIC WEATHER SERVICE MARINE
 6821 WEATHER OBSERVER
 6842 WEATHER FORECASTER
 7000 BASIC AIRFIELD SERVICES MARINE
 7011 AIRCRAFT RECOVERY SPECIALIST
 7041 AVIATION OPERATION SPECIALIST
 7051 AIRCRAFT FIREFIGHTING AND RESCUE SPECIALIST
 7200 BASIC AIR CONTROL/AIR SUPPORT/AIR WARFARE MARINE
 7212 LOW ALTITUDE AIR DEFENSE GUNNER
 7222 HAWK MISSILE SYSTEM OPERATOR
 7234 AIR COMMAND AND CONTROL ELECTRONICS OPERATOR
 7236 TACTICAL AIR DEFENSE CONTROLLER
 7242 AIR SUPPORT OPERATIONS OPERATOR
 7300 BASIC AIR TRAFFIC CONTROL/ENLISTED FLIGHT CREW MARINE
 7311 AIR TRAFFIC CONTROLLER-TRAINEE
 7312 AIR TRAFFIC CONTROLLER-TOWER
 7322 AIR TRAFFIC CONTROLLER-RADAR
 7324 RADAR APPROACH CONTROLLER
 7371 AERIAL NAVIGATOR-TRAINEE
 7372 FIRST NAVIGATOR
 7381 AIRBORNE RADIO OPERATOR/LOADMASTER-TRAINEE
 7382 AIRBORNE RADIO OPERATOR/LOADMASTER
 7391 AIC OPERATIONS CHIEF

ADMIN

0100 BASIC ADMIN MARINE
 0121 PERSONNEL CLERK
 0131 UNIT DIARY CLERK
 0151 ADMIN CLERK
 0161 POSTAL CLERK
 0171 MANPOWER INFO SYS ANALYST
 0193 PERSONNEL/ADMIN CHIEF
 3000 BASIC SUPPLY ADMINISTRATION & OPER MARINE
 3043 SUPPLY ADMIN & OPER CLERK
 3044 PURCHASING AND CONTRACTING SPECIALIST
 3051 WAREHOUSE CLERK
 3052 PACKAGING SPECIALIST
 3061 SUBSISTENCE SUPPLY CLERK
 3072 AVIATION SUPPLY CLERK
 3073 AUTOMATED INFO SYS COMPUTER OPERATOR
 3400 BASIC AUDITING FINANCE & ACCTG MARINE

3421 PERSONAL FINANCIAL RECORDS CLERK
 3431 TRAVEL CLERK
 3432 DISBURSER/DISBURSING CHIEF
 3441 NAF AUDIT TECHNICIAN
 3451 ACCOUNTING TECH
 4400 BASIC LEGAL SERVICES MARINE
 4421 LEGAL SERVICES SPECIALIST
 4425 LEGAL SERVICES NOTEREADER/TRANSCRIBER(STENO TYPE)
 4429 LEGAL SERVICES REPORTER(STENO TYPE)

OIHTECH (Other Technical)

2500 BASIC OPERATIONAL COMMUNICATOR
 2512 FIELD WIREMAN
 2513 CONSTRUCTION WIREMAN
 2514 UNIT LEVEL SWITCHBOARD INSTALL/MAINTAINER
 2515 ULS CENTRAL OFC OPERATOR/MAINTAINER
 2519 WIRE CHIEF
 2531 FIELD RADIO OPERATOR
 2532 MICROWAVE EQUIPMENT OPERATOR
 2533 RADIO TELEGRAPH OPERATOR
 2534 HIGH FREQUENCY COMM CENTRAL OPERATOR
 2535 FLEET SATCOM TERMINAL OPERATOR
 2536 GROUND MOBILE FORCES SATCOM OPERATOR
 2537 RADIO CHIEF
 2538 FLEET SATCOM RADIO CHIEF
 2539 GROUND MOBILE FORCES SATCOM RADIO CHIEF
 2542 COMMUNICATION CENTER OPERATOR
 2549 COMMUNICATION CENTER CHIEF
 2581 RADIO FREQUENCY MANAGEMENT TECH
 2585 PLRS MASTER STATION OPERATOR
 2591 OPERATIONAL COMMUNICATION CHIEF
 4000 BASIC DATA SYSTEMS MARINE
 4025 NETWORK CONTROL SPECIALIST
 4034 COMPUTER OPERATOR
 4036 DATA CONTROL SPECIALIST
 4041 TELEPROCESSING SPECIALIST
 4063 PROGRAMMER, COBOL
 4065 PROGRAMMER, ALC
 4066 SMALL COMPUTER SYSTEMS SPECIALIST(SCSS)
 4067 PROGRAMMER, ADA
 4069 SYSTEMS PROGRAMMER
 4071 DATA BASE MANAGEMENT SYSTEM(DBMS) SPECIALIST
 4075 COMPUTER SECURITY SPECIALIST
 4099 DATA PROCESSING CHIEF

Table B-1. (Continued)

| | |
|--|---|
| OTHER-OTHER | 2629 SIGNALS INTELLIGENCE ANALYST |
| 0200 BASIC INTELLIGENCE MARINE | 2631 NON-MORSE INTERCEPT OPERATOR/ANALYST |
| 0211 COUNTERINTELLIGENCE SPECIALIST | 2643 CRYPTOLOGIC TRANSLATOR |
| 0231 INTELLIGENCE SPECIALIST | 2649 CRYPTANALYST |
| 0241 IMAGERY INTERPRETATION SPECIALIST | 2651 SPECIAL INTELLIGENCE COMMUNICATOR |
| 0251 INTERROGATION TRANSLATION SPECIALIST | 2659 CRYPTOLOGIC SUPPORT SPECIALIST |
| 0261 MAPPING SPECIALIST | 2671 CRYPTOLOGIC LINGUIST, PERSIAN/SEMITIC |
| 0291 INTELLIGENCE CHIEF | 2673 CRYPTOLOGIC LINGUIST, EAST ASIAN |
| 0400 BASIC LOGISTICS MARINE | 2674 CRYPTOLOGIC LINGUIST, SPANISH |
| 0411 MAINTENANCE MANAGEMENT SPECIALIST | 2675 CRYPTOLOGIC LINGUIST, RUSSIAN |
| 0431 LOGISTICS/EMBARKATION SPECIALIST | 2691 SIGNALS INTELLIGENCE/ELECTRIC WARFARE CHIEF |
| 0451 AIR DELIVERY SPECIALIST | 3100 BASIC TRAFFIC MANAGEMENT MARINE |
| 0481 LANDING SUPPORT SPECIALIST | 3112 TRAFFIC MANAGEMENT SPECIALIST |
| 0491 COMBAT SERVICE SUPPORT CHIEF | 3300 BASIC FOOD SERVICE MARINE |
| 1100 BASIC UTILITIES MARINE | 3372 ENLISTED AID (FOOD) |
| 1141 ELECTRICIAN | 3381 FOOD SERVICE SPECIALIST |
| 1142 ELECTRICAL EQUIPMENT REPAIR SPECIALIST | 3500 BASIC MOTOR TRANSPORT MARINE |
| 1161 REFRIGERATION MECHANIC | 3513 BODY REPAIR MECHANIC |
| 1169 UTILITIES CHIEF | 3521 ORGANIZATIONAL AUTOMOTIVE MECHANIC |
| 1171 HYGIENE EQUIPMENT OPERATOR | 3522 INTERMEDIATE AUTOMOTIVE MECHANIC |
| 1181 FABRIC REPAIR SPECIALIST | 3523 VEHICLE RECOVERY MECHANIC |
| 1300 BASIC ENG CONSTRUCTION AND EQUIP MARINE | 3524 FUEL AND ELECTRICAL SYSTEMS MECHANIC |
| 1316 METAL WORKER | 3525 CRASH/FIRE/RESCUE VEHICLE MECHANIC |
| 1341 ENG EQUIP MECHANIC | 3529 MOTOR TRANSPORT MAINTENANCE CHIEF |
| 1345 ENG EQUIP OPERATOR | 3531 MOTOR VEHICLE OPERATOR |
| 1346 ROCK QUARRY OPERATOR | 3533 LOGISTICS VEHICLE SYSTEM OPERATOR |
| 1349 ENG EQUIP CHIEF | 3534 SEMITRAILER REFUELLER OPERATOR |
| 1361 ENG ASSISTANT | 3537 MOTOR TRANSPORT OPERATION CHIEF |
| 1371 COMBAT ENG | 3538 LICENSING EXAMINER |
| 1391 BULK FUEL SPECIALIST | 4100 BASIC MARINE CORPS EXCHANGE MARINE |
| 1500 BASIC PRINT AND REPRODUCTION MARINE | 4131 EXCHANGE MARINE |
| 1521 OFFSET PRESS OPERATOR | 4132 CLUB MANAGER/TREASURER |
| 1532 PROCESS CAMERA OPERATOR | 4300 BASIC PUBLIC AFFAIRS MARINE |
| 1541 REPRODUCTION CHIEF | 4313 BROADCAST JOURNALIST |
| 1542 REPRODUCTION EQUIP REPAIRER | 4321 PRINT JOURNALIST |
| 2100 BASIC ORDNANCE MARINE | 4322 PHOTOJOURNALIST |
| 2111 SMALL ARMS REPAIR/TECHNICIAN | 4391 PUBLIC AFFAIRS CHIEF |
| 2112 RIFLE TEAM EQUIP REPAIRER | 4600 BASIC TRAINING AND VISUAL INFO SUPPORT MARINE |
| 2131 TOWED ARTILLERY SYS TECHNICIAN | 4611 GRAPHICS SPECIALIST |
| 2141 ASSAULT AMPHIBIAN VEHICLE REPAIR/TECH | 4621 TRAINING EQUIPMENT AND LIBRARY SPECIALIST |
| 2143 SELF-PROPELLED ARTILLERY REPAIR/TECH | 4641 COMBAT STILL PHOTOGRAPHER |
| 2145 COMBAT TANK REPAIR/TECH | 4642 COMBAT PHOTOGRAPHIC TECHNICIAN |
| 2146 MAIN BATTLE TANK REPAIR/TECH | 4653 COMBAT VISUAL INFORMATION EQUIPMENT TECHNICIAN |
| 2147 LIGHT ARMORED VEHICLE REPAIR/TECH | 4671 COMBAT PHOTOGRAPHER/MOTION MEDIA |
| 2149 ORDNANCE VEHICLE MAINTENANCE CHIEF | 4691 TRAINING AND VISUAL INFORMATION SUPPORT CHIEF |
| 2161 MACHINIST | 5500 BASIC MUSICIAN |
| 2171 OPTICAL INSTRUMENT REPAIRER | 5519 ENLISTED BAND LEADER |
| 2175 ELEC-OPT/LASER/SML MISSILE/ORD CIR CARD TECH | 5521 BAND DRUM MAJOR |
| 2181 GROUND ORD WEAPONS CHIEF/SR GRD ORD CHIEF | 5523 INSTRUMENT REPAIR SPECIALIST |
| 2182 ORDNANCE ELECTRONICS EQUIPMENT CHIEF | 5526 MUSICIAN, OBEO/ENGLISH HORN |
| 2300 BASIC AMMUNITION & EXPLSV ORDN DISP MARINE | 5528 MUSICIAN, BASSOON |
| 2311 AMMUNITION TECH | 5534 MUSICIAN, CLARINET |
| 2336 EXPLOSIVE ORDNANCE DISPOSAL TECH | 5536 MUSICIAN, FLUTE AND PICCOLO |
| 2362 GROUND NUCLEAR ORDNANCE TECH | 5537 MUSICIAN, SAXOPHONE |
| 2600 BASIC SIGNAL INTELLIGENCE/GND ELEC WARFARE OPER | 5541 MUSICIAN, CORNET/TRUMPET |
| 2621 MANUAL MORSE INTERCEPT OPERATOR | 5543 MUSICIAN, BARITONE HORN/EUPHONIUM |
| | 5544 MUSICIAN, FRENCH HORN |

Table B-1. (Continued)

| | |
|--|--|
| 5546 MUSICIAN, TROMBONE | 9900 BASIC MARINE GENERAL SERVICE |
| 5547 MUSICIAN, TUBA AND STRING BASS/ELECTRIC BASS | 9915 SPECIAL ASSIGNMENT-ENLISTED |
| 5563 MUSICIAN, PERCUSSION(DRUMS, TIMPANI, AND MALLETS) | 9916 BILLET DESIGNATOR-ENLISTED |
| 5565 MUSICIAN, PIANO OR ACCORDION OR GUITAR | 9917 COLLEGE DEGREE-ENLISTED |
| 5571 DRUM AND BUGLE CORPS DRUM MAJOR | 9919 MARINE AIR GROUND TASK FORCE PLANS/OPERATIONS SPEC |
| 5574 MUSICIAN, SOPRANO OR MELLOPHONE BUGLE | 9935 SPECIAL TECHNICAL OPERATIONS(OFFICER: 1B, ENLISTED) |
| 5576 MUSICIAN, FRENCH HORN BUGLE | 9962 PARACHUTIST(OFFICER: 2E/ENLISTED) |
| 5577 MUSICIAN, BASS BARITONE BUGLE | 9971 BASIC MARINE WITH ENLISTMENT GUARANTEE |
| 5579 MUSICIAN, CONTRABASS BUGLE | 9981 TACTICAL DATA SYSTEMS SPEC (OFFICER: 7E/ENLISTED) |
| 5593 MUSICIAN, PERCUSSION (DRUM AND BUGLE CORPS) | 9982 SMALL COMPUTER SYSTEMS OPERATOR/PROGRAMMER |
| 5700 BASIC NUCLEAR, BIOLOGICAL AND CHEMICAL MARINE | 9991 SERGEANT MAJOR OF THE MARINE CORPS |
| 5711 NUCLEAR, BIOLOGICAL AND CHEMICAL DEFENSE SPECIALIST | 9999 SERGEANT MAJOR/FIRST SERGEANT |
| 5800 BASIC MILITARY POLICE AND CORRECTIONS MARINE | |
| 5811 MILITARY POLICE | |
| 5812 MILITARY POLICE DOG HANDLER | |
| 5813 ACCIDENT INVESTIGATOR | |
| 5814 CRIME PREVENTION PHYSICAL SECURITY SPECIALIST | |
| 5821 CRIMINAL INVESTIGATOR | |
| 5822 POLYGRAPH EXAMINER | |
| 5831 CORRECTIONAL SPECIALIST | |
| 5832 CORRECTIONAL COUNSELOR | |
| 8033 QUALITY ASSURANCE TECH (SUBSISTENCE) | |
| 8151 GUARD | |
| 8152 MARINE CORPS SECURITY FORCE(MCSF)GUARD | |
| 8153 CADRE TRAINER | |
| 8154 MARINE CORPS SEC FORCE CLOSE QUART BTL TEAM MBR | |
| 8231 EDUCATION ASSISTANT | |
| 8411 RECRUITER | |
| 8412 CAREER RECRUITER | |
| 8421 CAREER PLANNER | |
| 8431 PSYCHOLOGICAL OPERATIONS NCO | |
| 8441 CIVIL AFFAIRS NCO | |
| 8511 DRILL INSTRUCTOR | |
| 8531 MARKSMANSHIP INSTRUCTOR | |
| 8532 SMALL ARMS WEAPONS INSTRUCTOR | |
| 8538 SUBSTANCE ABUSE COUNSELOR | |
| 8541 SCOUT SNIPER | |
| 8563 WATER SAFETY/SURVIVAL INSTRUCTOR | |
| 8611 INTERPRETER(DESIGNATED LANGUAGE) | |
| 8621 SURVEILLANCE SENSOR OPERATOR | |
| 8631 SURVEILLANCE SENSOR MAINTENANCE MAN | |
| 8652 RECONNAISSANCE MAN PARACHUTE JUMP QUALIFIED | |
| 8653 RECONNAISSANCE MAN SCUBA QUALIFIED | |
| 8654 RECONNAISSANCE MAN PARACHUTE AND SCUBA QUALIFIED | |
| 8711 INFANTRY OPERATIONS SPECIALIST | |
| 8811 FIREFIGHTER | |
| 8911 BARRACKS AND GROUNDS MARINE | |
| 8915 FOOD SERVICE ATTENDANT | |
| 8921 ATHLETIC AND RECREATION ASSISTANT | |
| 8981 MILITARY AFFILIATE RADIO SYSTEM RADIO OPERATOR | |
| 9951 GRAVES REGISTRATION SPECIALIST | |
| 9911 MEMBER UNITED STATES MARINE BAND | |

Table B-2. Counts of Zone A reenlistments, by MOS

| | | | |
|--|------|--|------|
| 100 BASIC ADMIN MARINE | 19 | 1542 REPRODUCTION EQUIP REPAIRER | 0 |
| 121 PERSONNEL CLERK | 328 | 1800 BASIC TANK AND ASSAULT AMPHIBIAN CREWMAN | 4 |
| 131 UNIT DIARY CLERK | 295 | 1811 M60A1 TANK CREWMAN | 206 |
| 151 ADMIN CLERK | 1014 | 1812 M1A1 TANK CREWMAN | 0 |
| 161 POSTAL CLERK | 64 | 1833 ASSAULT AMPHIBIAN CREWMAN | 347 |
| 171 MAINTENANCE INFO SYS ANALYST | 0 | 2100 BASIC ORDNANCE MARINE | 20 |
| 193 PERSONNEL/ADMIN CHIEF | 3 | 2111 SMALL ARMS REPAIR/TECHNICIAN | 186 |
| 200 BASIC INTELLIGENCE MARINE | 28 | 2112 RIFLE TEAM EQUIP REPAIRER | 0 |
| 211 COUNTERINTELLIGENCE SPECIALIST | 2 | 2131 TOWED ARTILLERY SYS TECHNICIAN | 58 |
| 231 INTELLIGENCE SPECIALIST | 67 | 2141 ASSAULT AMPHIBIAN VEHICLE REPAIR/TECH | 39 |
| 241 IMAGERY INTERPRETATION SPECIALIST | 7 | 2143 SELF-PROPELLED ARTILLERY REPAIR/TECH | 4 |
| 251 INTERROGATION TRANSLATION SPECIALIST | 3 | 2145 COMBAT TANK REPAIR/TECH | 81 |
| 261 MAPPING SPECIALIST | 0 | 2146 MAIN BATTLE TANK REPAIR/TECH | 16 |
| 291 INTELLIGENCE CHIEF | 0 | 2147 LIGHT ARMORED VEHICLE REPAIR/TECH | 13 |
| 300 BASIC INFANTRY MAN | 0 | 2149 ORDNANCE VEHICLE MAINTENANCE CHIEF | 0 |
| 311 RIFLEMAN | 18 | 2161 MACHINIST | 29 |
| 313 LAV CREWMAN | 3651 | 2171 OPTICAL INSTRUMENT REPAIRER | 29 |
| 321 RECONNAISSANCE MAN | 53 | 2175 ELEC-OP/LASER/SML MISSILE/ORD CIR CARD TECH | 0 |
| 331 MACHINEGUNNER | 0 | 2181 GROUND ORD WEAPONS CHIEF/SR GRD ORD CHIEF | 0 |
| 332 GUNNER HEAVY MACHINEGUN | 782 | 2182 ORDNANCE ELECTRONICS EQUIPMENT CHIEF | 0 |
| 341 MORTARMAN | 0 | 2300 BASIC AMMUNITION & EXPLSV ORDN DISP MARINE | 11 |
| 351 ASSAULT MAN | 787 | 2311 AMMUNITION TECH | 197 |
| 352 AIR TANK ASSAULT GUIDED MISSILEMAN | 817 | 2336 EXPLOSIVE ORDNANCE DISPOSAL TECH | 12 |
| 369 INFANTRY UNIT LEADER | 210 | 2362 GROUND NUCLEAR ORDNANCE TECH | 0 |
| 400 BASIC LOGISTICS MARINE | 19 | 2500 BASIC OPERATIONAL COMMUNICATOR | 7 |
| 411 MAINTENANCE MANAGEMENT SPECIALIST | 22 | 2512 FIELD WIREMAN | 521 |
| 431 LOGISTICS/EMBARKATION SPECIALIST | 57 | 2513 CONSTRUCTION WIREMAN | 30 |
| 451 AIR DELIVERY SPECIALIST | 149 | 2514 UNIT LEVEL SWITCHBOARD INSTALL/MAINTAINER | 0 |
| 481 LAUNCHING SUPPORT SPECIALIST | 39 | 2515 ULS CENTRAL OFC OPERATOR/MAINTAINER | 0 |
| 491 COMBAT SERVICE SUPPORT CHIEF | 104 | 2519 WIRE CHIEF | 6 |
| 800 BASIC FIELD ARTILLERY MAN | 0 | 2531 FIELD RADIO OPERATOR | 1346 |
| 811 FIELD ARTILLERY CANNONEER | 638 | 2532 MICROWAVE EQUIPMENT OPERATOR | 42 |
| 812 FIELD ARTILLERY NUCLEAR PROJECTILEMAN | 0 | 2533 RADIO TELEGRAPH OPERATOR | 0 |
| 842 FIELD ARTILLERY RADAR OPERATOR | 22 | 2534 HIGH FREQUENCY COMM CENTRAL OPERATOR | 64 |
| 844 FIELD ARTILLERY FIRE CONTROL MAN | 231 | 2535 FLEET SATCOM TERMINAL OPERATOR | 0 |
| 847 ARTILLERY METEOROLOGICAL MAN | 14 | 2536 GROUND MOBILE FORCES SATCOM OPERATOR | 2 |
| 848 FIELD ARTILLERY OPERATIONS MAN | 0 | 2537 RADIO CHIEF | 6 |
| 861 FIRE SUPPORT MAN | 63 | 2538 FLEET SATCOM RADIO CHIEF | 0 |
| 1100 BASIC UTILITIES MARINE | 7 | 2539 GROUND MOBILE FORCES SATCOM RADIO CHIEF | 0 |
| 1141 ELECTRICIAN | 95 | 2542 COMMUNICATION CENTER OPERATOR | 463 |
| 1142 ELECTRICAL EQUIPMENT REPAIR SPECIALIST | 131 | 2549 COMMUNICATION CENTER CHIEF | 3 |
| 1161 REFRIGERATION MECHANIC | 58 | 2581 RADIO FREQUENCY MANAGEMENT TECH | 0 |
| 1169 UTILITIES CHIEF | 1 | 2585 PERS MASTER STATION OPERATOR | 0 |
| 1171 HYGIENE EQUIPMENT OPERATOR | 116 | 2591 OPERATIONAL COMMUNICATION CHIEF | 1 |
| 1181 FABRIC REPAIR SPECIALIST | 22 | 2600 BASIC SIGNAL INTELLIGENCE/ORD ELEC WARFARE OPER | 5 |
| 1300 BASIC ENG CONSTRUCTION AND EQUIP MARINE | 18 | 2621 MANUAL MORSE INTERCEPT OPERATOR | 108 |
| 1316 METAL WORKER | 55 | 2629 SIGNALS INTELLIGENCE ANALYST | 31 |
| 1341 ENG EQUIP MECHANIC | 291 | 2631 NON-MORSE INTERCEPT OPERATOR/ANALYST | 0 |
| 1345 ENG EQUIP OPERATOR | 257 | 2643 CRYPTOLOGIC TRANSLATOR | 0 |
| 1346 RICK CHAIRY OPERATOR | 0 | 2649 CRYPTANALYST | 0 |
| 1349 ENG EQUIP CHIEF | 0 | 2651 SPECIAL INTELLIGENCE COMMUNICATOR | 60 |
| 1361 ENG ASSISTANT | 0 | 2659 CRYPTOLOGIC SUPPORT SPECIALIST | 0 |
| 1371 COMBAT ENG | 576 | 2671 CRYPTOLOGIC LINGUIST, PERSIAN/SEMITIC | 13 |
| 1391 BULK FUEL SPECIALIST | 257 | 2673 CRYPTOLOGIC LINGUIST, EAST ASIAN | 7 |
| 1500 BASIC PRINT AND REPRODUCTION MARINE | 1 | 2674 CRYPTOLOGIC LINGUIST, SPANISH | 13 |
| 1521 OFFSET PRESS OPERATOR | 20 | 2675 CRYPTOLOGIC LINGUIST, RUSSIAN | 9 |
| 1532 PROCESS CAMERA OPERATOR | 5 | 2691 SIGNALS INTELLIGENCE/ELECTRIC WARFARE CHIEF | 0 |
| 1541 REPRODUCTION CHIEF | 0 | 2800 BASIC DATA/COMM MAINTENANCE MARINE | 17 |
| | | 2811 TELEPHONE TECH | 75 |
| | | 2813 CABLE SYSTEMS TECH | 19 |

Table B-2. (Continued)

| | | | |
|--|------|--|-----|
| 2810 TELETYPE & TACTICAL OFC MACHINE TECH | 46 | 4030 DATA CONTROL SPECIALIST | 15 |
| 2821 COMPUTER TECHNICIAN | 0 | 4041 TELEPROCESSING SPECIALIST | 0 |
| 2822 ELECTRONIC SWITCHING EQUIP TECH | 9 | 4063 PROGRAMMER, CONTROL | 98 |
| 2823 TECHNICAL CONTROLLER | 0 | 4065 PROGRAMMER, ALC | 3 |
| 2824 MICROCOMPUTER REPAIRER | 0 | 4066 SMALL COMPUTER SYSTEMS SPECIALIST(SCSS) | 0 |
| 2826 AM/MSC-63A MAINTENANCE TECHNICIAN | 2 | 4067 PROGRAMMER, ADA | 0 |
| 2827 MOBILE DATA TERMINAL TECH | 3 | 4069 SYSTEMS PROGRAMMER | 1 |
| 2829 MOBILE COMM CENTRAL TECH | 0 | 4071 DATA BASE MANAGEMENT SYSTEM(DBMS) SPECIALIST | 0 |
| 2831 MICROWAVE EQUIP TECH | 33 | 4075 COMPUTER SECURITY SPECIALIST | 0 |
| 2833 FLEET SATELLITE TERMINAL TECH | 1 | 4099 DATA PROCESSING CHIEF | 0 |
| 2834 GROUND MOBILE FORCES SATCOM TECH | 0 | 4100 BASIC MARINE CORPS EXCHANGE MARINE | 0 |
| 2841 GROUND RADIO REPAIRER | 303 | 4131 EXCHANGE MARINE | 28 |
| 2842 PERS MAINTENANCE TECH | 0 | 4132 CLUB MANAGER/TREASURER | 0 |
| 2843 PERS SUPPORT MAINTENANCE TECH | 0 | 4300 BASIC PUBLIC AFFAIRS MARINE | 4 |
| 2861 RADIO TECHNICIAN | 1 | 4313 BROADCAST JOURNALIST | 7 |
| 2867 AM/ISC-95 RADIO TECH | 0 | 4321 PRINT JOURNALIST | 35 |
| 2871 TSI MEASUREMENT & DIAGNOSTIC EQUIP TECH | 18 | 4322 PHOTOJOURNALIST | 0 |
| 2874 METEOROLOGY TECH | 1 | 4391 PUBLIC AFFAIRS CHIEF | 0 |
| 2877 RADIAC INSTRUMENT TECH | 9 | 4400 BASIC LEGAL SERVICES MARINE | 4 |
| 2881 COMM SECURITY EQUIP TECH | 34 | 4421 LEGAL SERVICES SPECIALIST | 70 |
| 2884 GROUND RADAR REPAIRER | 25 | 4425 LEGAL SERVICES NOTEREADER/TRANSCRIBER(STENO TYPE) | 19 |
| 2885 ARTILLERY ELECTRONIC SYSTEMS REPAIRER | 4 | 4429 LEGAL SERVICES REPORTER(STENO TYPE) | 1 |
| 2887 CUMMIES MORTAR RADAR REPAIRER | 0 | 4600 BASIC TRAINING AND VISUAL INFO SUPPORT MARINE | 12 |
| 2889 GROUND RADAR TECHNICIAN | 0 | 4611 GRAPHICS SPECIALIST | 13 |
| 2891 DATA/COMM MAINTENANCE CHIEF | 0 | 4621 TRAINING EQUIPMENT AND LIBRARY SPECIALIST | 21 |
| 3000 BASIC SUPPLY ADMINISTRATION & OPER MARINE | 27 | 4641 COMBAT STILL PHOTOGRAPHER | 23 |
| 3043 SUPPLY ADMIN & OPER CLERK | 636 | 4642 COMBAT PHOTOGRAPHIC TECHNICIAN | 3 |
| 3044 PURCHASING AND CONTRACTING SPECIALIST | 5 | 4653 COMBAT VISUAL INFORMATION EQUIPMENT TECHNICIAN | 0 |
| 3051 WAREHOUSE CLERK | 679 | 4671 COMBAT PHOTOGRAPHER/MOTION MEDIA | 0 |
| 3052 PACKAGING SPECIALIST | 42 | 4691 TRAINING AND VISUAL INFORMATION SUPPORT CHIEF | 2 |
| 3061 SUBSISTENCE SUPPLY CLERK | 59 | 5300 BASIC MUSICIAN | 0 |
| 3072 AVIATION SUPPLY CLERK | 306 | 5319 ENLISTED BAND LEADER | 0 |
| 3073 AUTOMATED INFO SYS COMPUTER OPERATOR | 19 | 5321 BAND DRUM MAJOR | 0 |
| 3100 BASIC TRAFFIC MANAGEMENT MARINE | 2 | 5323 INSTRUMENT REPAIR SPECIALIST | 0 |
| 3112 TRAFFIC MANAGEMENT SPECIALIST | 46 | 5326 MUSICIAN, OBCE/ENGLISH HORN | 1 |
| 3300 BASIC FOOD SERVICE MARINE | 9 | 5328 MUSICIAN, BASSOON | 0 |
| 3372 ENLISTED AID (FOOD) | 0 | 5334 MUSICIAN, CLARINET | 13 |
| 3381 FOOD SERVICE SPECIALIST | 460 | 5337 MUSICIAN, FLUTE AND PICCOLO | 2 |
| 3400 BASIC AUDITING FINANCE & ACCTG MARINE | 0 | 5341 MUSICIAN, SAXOPHONE | 16 |
| 3421 PERSONAL FINANCIAL RECORDS CLERK | 188 | 5343 MUSICIAN, CORNET/TRUMPET | 25 |
| 3431 TRAVEL CLERK | 26 | 5344 MUSICIAN, BARITONE HORN/EUPHONIUM | 6 |
| 3432 DISPENSER/DISBURSING CHIEF | 1 | 5344 MUSICIAN, FRENCH HORN | 7 |
| 3441 NAF AIDIT TECHNICIAN | 3 | 5346 MUSICIAN, TROMBONE | 18 |
| 3451 ACCOUNTING TECH | 54 | 5347 MUSICIAN, TUBA AND STRING BASS/ELECTRIC BASS | 13 |
| 3500 BASIC MOTOR TRANSPORT MARINE | 25 | 5363 MUSICIAN, PERCUSSION(DRUMS, TIMPANI, AND MALLETS) | 12 |
| 3513 BODY REPAIR MECHANIC | 19 | 5365 MUSICIAN, PIANO OR ACCORDION OR GUITAR | 3 |
| 3521 ORGANIZATIONAL AUTOMOTIVE MECHANIC | 470 | 5371 DRUM AND BUGLE CORPS DRUM MAJOR | 0 |
| 3522 INTERMEDIATE AUTOMOTIVE MECHANIC | 238 | 5374 MUSICIAN, SOPRANO OR MELLOPHONE BUGLE | 14 |
| 3523 VEHICLE RECOVERY MECHANIC | 61 | 5376 MUSICIAN, FRENCH HORN BUGLE | 0 |
| 3524 FUEL AND ELECTRICAL SYSTEMS MECHANIC | 36 | 5377 MUSICIAN, BASS BARITONE BUGLE | 11 |
| 3525 CRASH/FIRE/RESCUE VEHICLE MECHANIC | 0 | 5379 MUSICIAN, CONTRABASS BUGLE | 0 |
| 3529 MOTOR TRANSPORT MAINTENANCE CHIEF | 4 | 5393 MUSICIAN, PERCUSSION (DRUM AND BUGLE CORPS) | 0 |
| 3531 MOTOR VEHICLE OPERATOR | 1206 | 5700 BASIC NUCLEAR, BIOLOGICAL AND CHEMICAL MARINE | 18 |
| 3533 LOGISTICS VEHICLE SYSTEM OPERATOR | 237 | 5711 NUCLEAR, BIOLOGICAL AND CHEMICAL DEFENSE SPECIALIST | 65 |
| 3534 SEMITRAILER REFUELLER OPERATOR | 63 | 5800 BASIC MILITARY POLICE AND CORRECTIONS MARINE | 26 |
| 3537 MOTOR TRANSPORT OPERATION CHIEF | 2 | 5811 MILITARY POLICE | 533 |
| 4000 BASIC DATA SYSTEMS MARINE | 0 | 5812 MILITARY POLICE DOG HANDLER | 30 |
| 4025 NETWORK CONTROL SPECIALIST | 24 | 5813 ACCIDENT INVESTIGATOR | 4 |
| 4034 COMPUTER OPERATOR | 0 | 5814 CRIME PREVENTION PHYSICAL SECURITY SPECIALIST | 0 |
| | 128 | 5821 CRIMINAL INVESTIGATOR | 2 |

Table B-2. (Continued)

| | | | |
|---|-----|---|-----|
| 5822 POLYGRAPH EXAMINER | 0 | 6051 AIRCRAFT HYDRLIC/PNEUMATIC MECH-IRAIINEE | 1 |
| 5831 CORRECTIONAL SPECIALIST | 153 | 6052 AIRCRAFT HYDRLIC/PNEUMATIC MECH A-4/1A-4/OA-4 | 44 |
| 5832 CORRECTIONAL COUNSELOR | 0 | 6053 AIRCRAFT HYDRLIC/PNEUMATIC MECH A-6/EA-6 | 44 |
| 5909 BASIC ELECTRONICS MAINTENANCE MARINE | 28 | 6054 AIRCRAFT HYDRLIC/PNEUMATIC MECH F-4/RF-4 | 71 |
| 5911 MICROMINIATURE CIRCUIT REPAIR SPECIALIST | 0 | 6055 AIRCRAFT HYDRLIC/PNEUMATIC MECH AV-8/1AV-8 | 35 |
| 5921 HAWK FIRE CONTROL REPAIRER | 15 | 6056 AIRCRAFT HYDRLIC/PNEUMATIC MECH KC-130 | 25 |
| 5922 HAWK INFORMATION COORDINATION CENTRAL REPAIRER | 15 | 6057 AIRCRAFT HYDRLIC/PNEUMATIC MECH F/A-18 | 18 |
| 5923 HAWK FIRING SECTION REPAIRER | 18 | 6058 AIRCRAFT HYDRLIC/PNEUMATIC MECH OV-10 | 4 |
| 5924 HAWK PULSE RADAR TECHNICIAN | 2 | 6059 AIRCRAFT AIRFRAMES MAINI CHIEF | 0 |
| 5925 HAWK CONTINUOUS WAVE RADAR TECHNICIAN | 2 | 6060 FLIGHT EQUIP MARINE | 95 |
| 5927 HAWK FIRE CONTROL TECHNICIAN | 4 | 6071 AIRCRAFT MAINI GND SUP1 EQUIP MECIN IRIIEE | 6 |
| 5928 HAWK MISSILE SYSTEM MAINTENANCE TECHNICIAN | 0 | 6072 AIRCRAFT MAINI GSE/ELEC1/PNEUMATIC/SIRC/MECHANIC | 125 |
| 5929 HAWK MECHANICAL SYSTEM REPAIR | 4 | 6073 AIRCRAFT MAINI GSE ELEC1/REFRIGERATION MECHANIC | 17 |
| 5937 AVIATION RADIO REPAIRER | 41 | 6075 CRYOGENICS EQUIP OPERATOR | 31 |
| 5938 AVIATION METEOROLOGICAL EQUIPMENT TECHNICIAN | 17 | 6081 AIRCRAFT SAFETY EQUIP MECHANIC-IRIIEE | 2 |
| 5939 AVIATION RADIO TECHNICIAN | 0 | 6082 AIRCRAFT SAFETY EQUIP MECINIC A-4/1A-4/OA-4 | 29 |
| 5942 AVIATION RADAR REPAIRER (AN/IPS-59) | 6 | 6083 AIRCRAFT SAFETY EQUIP MECINIC A-6/EA-6 | 15 |
| 5943 AVIATION FIRE CONTROL REPAIRER | 18 | 6084 AIRCRAFT SAFETY EQUIP MECINIC F-4/RF-4 | 37 |
| 5944 AVIATION RADAR REPAIRER (AN/IPS-63) | 11 | 6085 AIRCRAFT SAFETY EQUIP MECINIC AV-8/1AV-8 | 17 |
| 5945 AVIATION RADAR REPAIRER (AN/IPS-32) | 22 | 6086 AIRCRAFT SAFETY EQUIP MECINIC KC-130 | 5 |
| 5947 AVIATION FIRE CONTROL TECHNICIAN | 0 | 6087 AIRCRAFT SAFETY EQUIP MECINIC F/A-18 | 13 |
| 5948 AVIATION RADAR TECHNICIAN | 0 | 6088 AIRCRAFT SAFETY EQUIP MECINIC OV-10 | 9 |
| 5952 AIR TRAFFIC CONTROL NAVIGATIONAL AIDS TECHNICIAN | 16 | 6089 AIRCRAFT SAFETY EQUIP CHIEF | 0 |
| 5953 AIR TRAFFIC CONTROL RADAR TECHNICIAN | 13 | 6091 AIRCRAFT STRUCTURES MECHANIC-IRAIINEE | 1 |
| 5954 AIR TRAFFIC CONTROL COMM TECHNICIAN | 19 | 6092 AIRCRAFT STRUCTURES MECHANIC A-4/1A-4/OA-4 | 34 |
| 5959 AIR TRAFFIC CONTROL SYSTEM MAINTENANCE CHIEF | 0 | 6093 AIRCRAFT STRUCTURES MECHANIC A-6/EA-6 | 21 |
| 5962 TACTICAL AIR COMMAND CENTRAL REPAIRER | 17 | 6094 AIRCRAFT STRUCTURES MECHANIC F-4/RF-4 | 58 |
| 5963 TACTICAL AIR OPERATIONS CENTRAL REPAIRER | 43 | 6095 AIRCRAFT STRUCTURES MECHANIC AV-8/1AV-8 | 27 |
| 5964 TACTICAL DATA COMMUNICATIONS CENTRAL REPAIRER | 13 | 6096 AIRCRAFT STRUCTURES MECHANIC KC-130 | 13 |
| 5974 TACTICAL AIR COMMAND CENTRAL TECHNICIAN | 0 | 6097 AIRCRAFT STRUCTURES MECHANIC F/A-18 | 21 |
| 5977 TACTICAL GENERAL PURPOSE COMPUTER TECHNICIAN | 1 | 6098 AIRCRAFT STRUCTURES MECHANIC OV-10 | 0 |
| 5978 TACTICAL DATA COMMUNICATIONS CENTRAL TECHNICIAN | 0 | 6111 HELICOPTER MECHANIC-IRAIINEE | 4 |
| 5979 TACTICAL AIR OPERATIONS CENTRAL TECHNICIAN | 1 | 6112 HELICOPTER MECHANIC CH-46 | 160 |
| 5982 COMP SYS TECH MONEYWELL DPS-6 (AI/UYK-65V)) SYS | 10 | 6113 HELICOPTER MECHANIC CH-53 | 120 |
| 5993 ELECTRONICS MAINTENANCE CHIEF | 0 | 6114 HELICOPTER MECHANIC U/AI-1 | 93 |
| 5994 TACTICAL DATA SYSTEMS MAINTENANCE CHIEF | 0 | 6115 HELICOPTER MECHANIC CH-53E | 44 |
| 6000 BASIC AIRCRAFT MAINTENANCE MARINE | 15 | 6119 HELICOPTER MAINTENANCE CHIEF | 0 |
| 6011 AIRCRAFT MECHANIC-IRAIINEE | 5 | 6122 HELICOPTER POWER PLANTS MECHANIC I-58 | 43 |
| 6012 AIRCRAFT MECHANIC A-4/1A-4/OA-4 | 69 | 6123 HELICOPTER POWER PLANTS MECHANIC I-64 | 42 |
| 6013 AIRCRAFT MECHANIC A-6/EA-6 | 56 | 6125 HELICOPTER POWER PLANTS MECHANIC I-400 | 37 |
| 6014 AIRCRAFT MECHANIC F-4/RF-4 | 73 | 6132 HELICOPTER DYNAMIC COMPONENTS MECHANIC | 39 |
| 6015 AIRCRAFT MECHANIC AV-8/1AV-8 | 48 | 6135 AIRCRAFT POWER PLNT 1ST CELL OPER ROTRY WNG | 2 |
| 6016 AIRCRAFT MECHANIC KC-130 | 32 | 6142 HELICOPTER STRUCTURES MECHANIC CH-46 | 59 |
| 6017 AIRCRAFT MECHANIC F/A-18 | 33 | 6143 HELICOPTER STRUCTURES MECHANIC CH-53 | 63 |
| 6018 AIRCRAFT MECHANIC OV-10 | 16 | 6144 HELICOPTER STRUCTURES MECHANIC U/AI-1 | 42 |
| 6019 AIRCRAFT MAINTENANCE CHIEF | 0 | 6152 HELICOPTER HYDRLIC/PNEUMATIC MECHANIC CH-46 | 29 |
| 6022 AIRCRAFT POWER PLANTS MECHANIC J-52 | 43 | 6153 HELICOPTER HYDRLIC/PNEUMATIC MECHANIC CH-53 | 25 |
| 6023 AIRCRAFT POWER PLANTS MECHANIC I-70 | 12 | 6154 HELICOPTER HYDRLIC/PNEUMATIC MECHANIC U/AI-1 | 21 |
| 6024 AIRCRAFT POWER PLANTS MECHANIC J-79 | 35 | 6155 HELICOPTER HYDRLIC/PNEUMATIC MECHANIC CH-53E | 19 |
| 6025 AIRCRAFT POWER PLANTS MECHANIC ROLLS ROYCE PEGASUS | 18 | 6159 HELICOPTER AIRFRAMES MAINI CHIEF | 0 |
| 6026 AIRCRAFT POWER PLANTS MECHANIC I-56 | 26 | 6162 PRESIDENTIAL SUPPORT SPECIALIST | 0 |
| 6027 AIRCRAFT POWER PLANTS MECHANIC F-404 | 5 | 6172 HELICOPTER CREW CHIEF CH-46 | 8 |
| 6031 AIRCRAFT FLIGHT ENGINEER KC-130 IRIINEE | 0 | 6173 HELICOPTER CREW CHIEF CH-53 A/D | 6 |
| 6032 AIRCRAFT FLIGHT ENGINEER KC-130 | 1 | 6174 HELICOPTER CREW CHIEF UH-1H | 3 |
| 6035 AIRCRAFT POWER PLANT TEST CELL OPER FXD WNG | 5 | 6175 HELICOPTER CREW CHIEF CH-53E | 3 |
| 6043 AIRCRAFT WELDER | 0 | 6176 HELICOPTER CREW CHIEF V-22 | 0 |
| 6044 AIRCRAFT NON-DESTRUCTIVE INSPECTION TECH | 1 | 6300 BASIC AVIONICS MARINE | 10 |
| 6046 AIRCRAFT MAINTENANCE ADMIN CLERK | 115 | 6311 AIRCRAFT COM/NAVG/ELEC/MEAP/SYS/TECH-IRIIEE OMA | 11 |
| 6047 AIRCRAFT MAINTENANCE DATA ANALYSIS TECH | 27 | 6312 AIRCRAFT COM/NAVG SYS TECH A-4/1A-4/OA-4 | 31 |
| 6048 AIRCRAFT MAINTENANCE COMPUTER SYS ANALY/OPER | 0 | 6313 AIRCRAFT COM/NAVG/RADAR SYS TECH A-6/EA-6A | 28 |

Table B-2. (Continued)

| | | | | | |
|------|--|-----|------|--|-----|
| 6314 | AIRCRAFT COM/NAV SYS TECH RF-4/F4 | 31 | 7051 | AIRCRAFT FIREFIGHTING AND RESCUE SPECIALIST | 132 |
| 6315 | AIRCRAFT COM/NAV SYS TECH AV-8 | 24 | 7200 | BASIC AIR CONTROLL/AIR SUPPORT/AIR WARFARE MARINE | 4 |
| 6316 | AIRCRAFT COM/NAV SYS TECH KC-130 | 16 | 7212 | LOW ALTITUDE AIR DEFENSE GUNNER | 69 |
| 6317 | AIRCRAFT COM/NAV/WEAP/SYS/TECH F/A-18 | 21 | 7222 | HAWK MISSILE SYSTEM OPERATOR | 74 |
| 6318 | AIRCRAFT COM/NAV/WEAP/WEAP/SYS/TECH OV-10 | 0 | 7234 | AIR COMMAND AND CONTROL ELECTRONICS OPERATOR | 34 |
| 6322 | AIRCRAFT COM/NAV/WEAP/WEAP/SYS/TECH CH-46 | 33 | 7236 | TACTICAL AIR DEFENSE CONTROLLER | 1 |
| 6323 | AIRCRAFT COM/NAV/WEAP/WEAP/SYS/TECH CH-53 | 31 | 7242 | AIR SUPPORT OPERATIONS OPERATOR | 49 |
| 6324 | AIRCRAFT COM/NAV/WEAP/WEAP/SYS/TECH UH-1 | 41 | 7246 | BASIC AIR TRAFFIC CONTROLLER/ENLISTED FLIGHT CREW MARINE | 9 |
| 6325 | AIRCRAFT COM/NAV/WEAP/WEAP/SYS/TECH V-22 | 0 | 7311 | AIR TRAFFIC CONTROLLER-TRAINEE | 6 |
| 6331 | AIRCRAFT ELEC SYS TECH-TRAINEE | 6 | 7312 | AIR TRAFFIC CONTROLLER-TOWER | 30 |
| 6333 | AIRCRAFT ELEC SYS TECH A-6/EA-6 | 51 | 7322 | AIR TRAFFIC CONTROLLER-RADAR | 48 |
| 6335 | AIRCRAFT ELEC SYS TECH AV-8 | 16 | 7324 | RADAR APPROACH CONTROLLER | 3 |
| 6337 | AIRCRAFT ELEC SYS TECH KC-130 | 16 | 7372 | FIRST NAVIGATOR | 11 |
| 6353 | AIRCRAFT WEAP SYS SPECIALIST A-6/IC-4C | 10 | 7381 | AIRBORNE RADIO OPERATOR/LOADMASTER-TRAINEE | 0 |
| 6354 | AIRCRAFT WEAP SYS SPECIALIST F-4S | 51 | 7392 | AIRBORNE RADIO OPERATOR/LOADMASTER | 0 |
| 6363 | AIRCRAFT RADAR RECON/CAMRA SYS TECH RF-4B | 5 | 7391 | AIC OPERATIONS CHIEF | 16 |
| 6366 | AIRCRAFT ELEC COM/NAV SYS TECH EA-6B | 27 | 8033 | QUALITY ASSURANCE TECH (SUBSISTENCE) | 0 |
| 6391 | AVIONICS MAINTENANCE CHIEF | 0 | 8151 | GUARD | 0 |
| 6404 | ADVC AIRCRAFT ELEC/INSIR/FLIGHT CONTROLLER SYS TECH IMA | 0 | 8152 | MARINE CORPS SECURITY FORCE (MCSF) GUARD | 0 |
| 6411 | AIRCRAFT COM/NAV SYS TECH-TRAINEE IMA | 2 | 8153 | CADRE TRAINEE | 0 |
| 6412 | AIRCRAFT COM/NAV SYS TECH IMA | 60 | 8154 | MARINE CORPS SEC FORCE CLOSE QUARTERS TEAM MGR | 0 |
| 6413 | AIRCRAFT NAV SYS TECH IIT/RADAR/TACAN IMA | 60 | 8231 | EDUCATION ASSISTANT | 0 |
| 6414 | ADVC AIRCRAFT COM/NAV SYS TECH IMA | 32 | 8411 | RECRUITER | 0 |
| 6422 | AIRCRAFT CRYPTOGRAPHIC SYS TECH IMA | 0 | 8412 | CAREER RECRUITER | 0 |
| 6423 | AVIA ELEC MICRO-MINIR/INSIR & CABLE REPAIR TECH | 0 | 8421 | CAREER PLANNER | 0 |
| 6431 | AIRCRAFT ELEC SYS TECH-TRAINEE | 0 | 8431 | PSYCHOLOGICAL OPERATIONS NCO | 0 |
| 6432 | AIRCRAFT ELEC/INSIR/FLI GIRL SYS TECH TX WING IMA | 56 | 8441 | CIVIL AFFAIRS NCO | 0 |
| 6433 | AIRCRAFT ELEC/INSIR/FLI GIRL SYS TECH HELICOPTER IMA | 42 | 8511 | DRILL INSTRUCTOR | 0 |
| 6434 | ADVC AIRCRAFT ELEC/INSIR/FLI GIRL SYS TECH IMA | 10 | 8531 | MARKSMANSHIP INSTRUCTOR | 0 |
| 6462 | AVIONICS TEST SET (ATS) TECH IMA | 0 | 8532 | SMALL ARMS WEAPONS INSTRUCTOR | 0 |
| 6463 | RADAR TEST SET (RTS)/RADAR SYS TEST STATION(S) TECH IMA | 4 | 8538 | SUBSTANCE ABUSE COUNSELOR | 0 |
| 6464 | AIRCRAFT INERTIAL NAVG SYS TECH IMA | 5 | 8541 | SCOUT SNIPER | 0 |
| 6465 | HYBRID TEST SET TECH IMA | 7 | 8563 | WATER SAFETY/SURVIVAL INSTRUCTOR | 0 |
| 6466 | AIRCRAFT FWD LOOKING INFRARED/ELEC-OPTICAL TECH IMA | 9 | 8611 | INTERPRETER (DESIGNATED LANGUAGE) | 0 |
| 6467 | AIRCRAFT RADCOM/CAI LTID TECH IMA | 12 | 8621 | SURVEILLANCE SENSOR OPERATOR | 0 |
| 6469 | ADVC AIRCRAFT ELEC EQUIP TEST SET/MBL ELEC TEST SET TECH IMA | 7 | 8631 | SURVEILLANCE SENSOR MAINTENANCE MAN | 0 |
| 6474 | AIRCRAFT WEAPONS SYS TECH WING-10 IMA | 25 | 8652 | RECONNAISSANCE MAN PARACHUTE JUMP QUALIFIED | 0 |
| 6475 | AIRCRAFT RADAR/IR RECONNAISSANCE SYS TECH IMA | 16 | 8653 | RECONNAISSANCE MAN SCUBA QUALIFIED | 0 |
| 6476 | AIRCRAFT CAMERA/ADAS SYS TECH IMA | 7 | 8654 | RECONNAISSANCE MAN PARACHUTE AND SCUBA QUALIFIED | 0 |
| 6478 | ADVC AIRCRAFT WEAPONS SYS TECH IMA | 0 | 8711 | INFANTRY OPERATIONS SPECIALIST | 0 |
| 6482 | AIRCRAFT ELEC COUNTERMEASURE SYS TECH FIXED WINGS IMA | 40 | 8811 | FIREFIGHTER | 0 |
| 6483 | AIRCRAFT ELEC COUNTERMEASURE SYS TECH HELICOPTER IMA | 6 | 8911 | BARRACKS AND GROUND MARINE | 0 |
| 6484 | AIRCRAFT ELEC COUNTERMEASURE SYS TECH EA-6 IMA | 9 | 8915 | FOOD SERVICE ATTENDANT | 0 |
| 6485 | ADVC AIRCRAFT ELEC COUNTERMEASURE SYS TECH IMA | 0 | 8921 | ATHLETIC AND RECREATION ASSISTANT | 0 |
| 6492 | AVIATION TME/ATE CALIBRATION & REPAIR TECH | 41 | 8981 | MILITARY AFFILIATE RADIO SYSTEM RADIO OPERATOR | 0 |
| 6500 | BASIC AVIATION ORDNANCE MARINE | 3 | 9051 | GRAVES REGISTRATION SPECIALIST | 0 |
| 6511 | AVIATION ORDNANCE TRAINEE | 3 | 9011 | MEMBER UNITED STATES MARINE BAND | 21 |
| 6521 | AVIATION ORDNANCE MUNITIONS TECHNICIAN | 75 | 9900 | BASIC MARINE GENERAL SERVICE | 7 |
| 6531 | AIRCRAFT ORDNANCE TECHNICIAN | 96 | 9915 | SPECIAL ASSIGNMENT-ENLISTED | 0 |
| 6541 | AVIATION ORDNANCE EQUIPMENT REPAIR TECHNICIAN | 60 | 9916 | BILLET DESIGNATOR-ENLISTED | 0 |
| 6551 | MARINE WING WEAPONS UNIT SPECIALIST | 0 | 9917 | COLLEGE DEGREE-ENLISTED | 0 |
| 6591 | AVIATION ORDNANCE CHIEF | 0 | 9919 | MARINE AIR GROUND TASK FORCE PLANS/OPERATIONS SPEC | 0 |
| 6600 | BASIC WEATHER SERVICE MARINE | 0 | 9935 | SPECIAL TECHNICAL OPERATIONS (OFFICER: 10, ENLISTED) | 0 |
| 6621 | WEATHER OBSERVER | 33 | 9932 | SCUBA MARINE (OFFICER/ENLISTED) (OFF: 2E) | 0 |
| 6642 | WEATHER FORECASTER | 2 | 9933 | PARACHUTIST/SCUBA MARINE (OFFICER: 2E/ENLISTED) | 0 |
| 7000 | BASIC AIRFIELD SERVICES MARINE | 7 | 9938 | GROUND SAFETY SPECIALIST (OFFICER: 4J/ENLISTED) | 0 |
| 7011 | AIRCRAFT RECOVERY SPECIALIST | 60 | 9962 | PARACHUTIST (OFFICER: 2E/ENLISTED) | 0 |
| 7041 | AVIATION OPERATION SPECIALIST | 112 | 9971 | BASIC MARINE WITH ENLISTMENT GUARANTEE | 2 |
| | | | 9981 | TACTICAL DATA SYSTEMS SPEC (OFFICER: 7E/ENLISTED) | 0 |

APPENDIX C

HISTORICAL TABLE OF SRB MULTIPLES, BY PMOS

APPENDIX C

HISTORICAL TABLE OF SRB MULTIPLES, BY PMOS

This appendix contains two tables. Table C-1 reports historical SRB multiples for Zone A for each MOS. Time periods are grouped roughly in the table by the fiscal year of the multiple. Notes at the end of the table specify the exact periods. Additionally, the four periods during which the Marine Corps suspended SRBs are noted at the end of the table. These suspension periods are not entered as a set of zero multiples, but are hard-coded into the text of the computer program.¹

Table C-2 is a SAS frequency, by decision year, of the length of Zone A reenlistments by the level of the SRB multiple. (Note that FY 1990 is only through June 1990.)

1. See CNA Information Memorandum 127, *CNA's Longitudinal ARSTAT Tracking Files for Enlisted Marines*, by Greg W. Steadman, forthcoming.

Table C-1. Zone A bonus levels by MOS (see note at end for dates)

| MOS | FY80 | FY81 | FY82 | FY83 | FY84 | FY85 | FY86 | FY87 | FY88 | FY89 | FY90 |
|------|------|------|------|-------|--------|------|------|------|------|---------|------|
| 0100 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0121 | 0 | 1 | 11 | 10000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0131 | 0 | 1 | 11 | 10100 | 000000 | 0200 | 011 | 00 | 00 | 0000000 | 0000 |
| 0151 | 0 | 1 | 11 | 00000 | 000011 | 0111 | 222 | 01 | 10 | 0000000 | 0000 |
| 0161 | 0 | 0 | 00 | 02000 | 000000 | 0001 | 222 | 01 | 10 | 0000000 | 2220 |
| 0193 | 0 | 1 | 11 | 11000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0200 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0211 | 0 | 3 | 33 | 44433 | 333444 | 4343 | 333 | 24 | 44 | 4444444 | 5550 |
| 0231 | 0 | 3 | 33 | 44431 | 110000 | 0000 | 034 | 34 | 44 | 4444444 | 5554 |
| 0241 | 0 | 3 | 33 | 44433 | 333444 | 4432 | 000 | 00 | 04 | 4444444 | 5555 |
| 0251 | 0 | 3 | 33 | 44433 | 333444 | 4430 | 011 | 10 | 04 | 4444444 | 5555 |
| 0290 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0291 | 0 | 3 | 30 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0300 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0311 | 0 | 0 | 02 | 10000 | 000022 | 0112 | 223 | 02 | 20 | 0111111 | 0000 |
| 0312 | 0 | 0 | 00 | 00000 | 000002 | 2220 | 000 | 00 | 00 | 0000000 | 0000 |
| 0313 | 0 | 0 | 00 | 00000 | 000002 | 2222 | 223 | 24 | 44 | 2222222 | 3000 |
| 0321 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 3000 |
| 0331 | 0 | 0 | 02 | 10000 | 000022 | 0112 | 223 | 02 | 20 | 0111111 | 0110 |
| 0341 | 0 | 0 | 02 | 10000 | 000022 | 0112 | 211 | 02 | 24 | 0111111 | 0000 |
| 0351 | 0 | 0 | 02 | 10010 | 000022 | 0112 | 200 | 02 | 20 | 0111111 | 0000 |
| 0352 | 0 | 0 | 02 | 13312 | 223444 | 4412 | 203 | 02 | 24 | 0111111 | 2220 |
| 0369 | 0 | 0 | 02 | 32100 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0400 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0411 | 2 | 3 | 30 | 02222 | 222333 | 1133 | 333 | 02 | 24 | 0000000 | 1000 |
| 0431 | 2 | 0 | 02 | 20000 | 000001 | 1120 | 002 | 02 | 24 | 0000000 | 0220 |
| 0441 | 2 | 0 | 01 | 10000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0451 | 2 | 0 | 03 | 33322 | 222333 | 3333 | 333 | 02 | 22 | 1111111 | 2000 |
| 0481 | 2 | 3 | 30 | 00000 | 000000 | 0033 | 333 | 03 | 33 | 1111000 | 0000 |
| 0491 | 2 | 3 | 30 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0800 | 0 | 0 | 00 | 00900 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0811 | 0 | 0 | 01 | 11100 | 000011 | 0112 | 223 | 12 | 24 | 0000000 | 0000 |
| 0842 | 0 | 0 | 00 | 00011 | 113555 | 5531 | 100 | 02 | 23 | 2222000 | 0000 |
| 0844 | 0 | 0 | 00 | 00011 | 113555 | 5533 | 300 | 01 | 10 | 0000000 | 0000 |
| 0846 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0847 | 0 | 0 | 01 | 13311 | 113555 | 5531 | 100 | 03 | 32 | 0000000 | 0000 |
| 0848 | 0 | 0 | 01 | 10623 | 333555 | 5543 | 333 | 00 | 00 | 0000000 | 0000 |
| 0849 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0861 | 0 | 0 | 01 | 10000 | 003555 | 5544 | 422 | 04 | 43 | 3333333 | 4000 |
| 0891 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 0894 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1100 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1121 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1141 | 0 | 0 | 00 | 00020 | 000124 | 4544 | 333 | 24 | 40 | 0000000 | 0000 |
| 1142 | 0 | 1 | 10 | 00002 | 122334 | 4544 | 333 | 24 | 43 | 4444444 | 4455 |
| 1161 | 0 | 0 | 00 | 00023 | 333334 | 4422 | 233 | 02 | 23 | 0000000 | 0000 |

Table C-1. (Continued)

| MOS | FY80 | FY81 | FY82 | FY83 | FY84 | FY85 | FY86 | FY87 | FY88 | FY89 | FY90 |
|------|------|------|------|-------|--------|------|------|------|------|---------|------|
| 1169 | 0 | 1 | 10 | 00000 | 000000 | 0020 | 000 | 00 | 00 | 0000000 | 0000 |
| 1171 | 0 | 1 | 10 | 00002 | 023334 | 4433 | 342 | 02 | 22 | 2222222 | 0000 |
| 1173 | 0 | 0 | 01 | 10000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1179 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1181 | 0 | 0 | 00 | 00000 | 003323 | 3333 | 344 | 03 | 35 | 1111000 | 0000 |
| 1182 | 0 | 0 | 00 | 00000 | 000012 | 2331 | 034 | 03 | 30 | 0000000 | 0000 |
| 1183 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1300 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1316 | 0 | 0 | 00 | 00001 | 112333 | 3433 | 322 | 04 | 43 | 2222222 | 4444 |
| 1341 | 0 | 0 | 01 | 10000 | 000011 | 1220 | 000 | 01 | 11 | 3333333 | 3330 |
| 1345 | 0 | 0 | 00 | 00000 | 000111 | 1220 | 002 | 04 | 40 | 0000000 | 0000 |
| 1349 | 0 | 0 | 00 | 01000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1371 | 0 | 0 | 00 | 00000 | 000112 | 0223 | 333 | 02 | 23 | 1111111 | 0000 |
| 1379 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1381 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1391 | 0 | 0 | 01 | 11030 | 200124 | 4433 | 242 | 04 | 42 | 0000000 | 0000 |
| 1400 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1411 | 0 | 2 | 21 | 10000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1421 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1422 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1431 | 0 | 2 | 22 | 20000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1432 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1441 | 0 | 2 | 22 | 23000 | 001100 | 0000 | 000 | 02 | 20 | 0000000 | 0000 |
| 1442 | 0 | 2 | 21 | 00002 | 020000 | 0000 | 000 | 02 | 20 | 2222444 | 5555 |
| 1453 | 0 | 2 | 20 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1500 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1521 | 2 | 2 | 20 | 00000 | 000000 | 0000 | 020 | 02 | 20 | 0000000 | 0000 |
| 1522 | 2 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1531 | 2 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1532 | 2 | 0 | 01 | 13320 | 000000 | 0000 | 000 | 03 | 34 | 0000000 | 1110 |
| 1541 | 2 | 2 | 22 | 20030 | 300000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1542 | 2 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1800 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 1811 | 0 | 1 | 11 | 31000 | 000000 | 0021 | 133 | 10 | 00 | 0000000 | 0000 |
| 1833 | 0 | 1 | 11 | 30000 | 001223 | 3331 | 133 | 02 | 20 | 0000000 | 0000 |
| 2100 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2111 | 1 | 2 | 21 | 00001 | 012322 | 2322 | 200 | 04 | 40 | 3333333 | 1000 |
| 2112 | 1 | 2 | 22 | 23433 | 333444 | 4433 | 200 | 00 | 00 | 0000000 | 0000 |
| 2131 | 1 | 2 | 22 | 22332 | 222333 | 3433 | 342 | 04 | 40 | 1111000 | 0000 |
| 2141 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 41 | 3333333 | 3000 |
| 2142 | 1 | 2 | 22 | 23311 | 212333 | 3431 | 000 | 04 | 40 | 0000000 | 0000 |
| 2143 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 35 | 4444444 | 3000 |
| 2144 | 1 | 2 | 22 | 20001 | 112333 | 3323 | 311 | 03 | 30 | 0000000 | 0000 |
| 2145 | 1 | 2 | 22 | 20111 | 112333 | 3322 | 242 | 04 | 41 | 4444444 | 3344 |
| 2146 | 1 | 2 | 22 | 23433 | 333333 | 3444 | 445 | 24 | 40 | 0000000 | 0000 |
| 2147 | 1 | 0 | 00 | 00000 | 002222 | 2333 | 555 | 24 | 40 | 4444444 | 4440 |
| 2149 | 1 | 2 | 20 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2161 | 1 | 2 | 21 | 16632 | 323333 | 3322 | 002 | 02 | 24 | 0000000 | 4440 |
| 2171 | 1 | 2 | 21 | 10223 | 333334 | 4555 | 543 | 00 | 43 | 4444400 | 3344 |
| 2172 | 1 | 2 | 22 | 26654 | 444444 | 4555 | 555 | 24 | 40 | 0000000 | 0000 |
| 2181 | 1 | 2 | 20 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2191 | 1 | 2 | 20 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2300 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |

Table C-1. (Continued)

| MOS | FY80 | FY81 | FY82 | FY83 | FY84 | FY85 | FY86 | FY87 | FY88 | FY89 | FY90 |
|------|------|------|------|-------|--------|------|------|------|------|---------|------|
| 2311 | 0 | 1 | 10 | 00000 | 000000 | 0233 | 344 | 14 | 40 | 3333333 | 0000 |
| 2336 | 0 | 1 | 13 | 34433 | 333334 | 4455 | 555 | 24 | 44 | 4444444 | 5555 |
| 2500 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2512 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2513 | 0 | 2 | 23 | 33333 | 333334 | 4432 | 222 | 04 | 43 | 3333333 | 0000 |
| 2519 | 0 | 0 | 00 | 03333 | 333333 | 3330 | 200 | 03 | 34 | 4444000 | 5555 |
| 2531 | 0 | 0 | 01 | 00000 | 000000 | 0222 | 000 | 02 | 20 | 0000000 | 0000 |
| 2532 | 0 | 2 | 23 | 33330 | 000011 | 1100 | 000 | 03 | 33 | 4444000 | 0000 |
| 2534 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2535 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 05 | 0000000 | 0000 |
| 2536 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 4444444 | 5555 |
| 2537 | 0 | 0 | 02 | 03312 | 222222 | 2200 | 000 | 00 | 00 | 0000000 | 0000 |
| 2538 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2539 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2542 | 0 | 2 | 21 | 00000 | 000000 | 0000 | 011 | 00 | 00 | 0000000 | 0000 |
| 2549 | 0 | 1 | 13 | 33430 | 301212 | 2333 | 322 | 10 | 04 | 4444000 | 0000 |
| 2591 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2600 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2621 | 2 | 4 | 43 | 32333 | 335555 | 5533 | 302 | 04 | 44 | 4444222 | 2000 |
| 2622 | 2 | 4 | 46 | 63333 | 330000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2629 | 2 | 4 | 46 | 66655 | 555555 | 5555 | 554 | 04 | 44 | 4444000 | 2055 |
| 2631 | 2 | 4 | 46 | 66640 | 100000 | 0000 | 000 | 04 | 43 | 4444333 | 4444 |
| 2632 | 2 | 4 | 45 | 46655 | 555555 | 5555 | 555 | 04 | 40 | 0000000 | 0000 |
| 2639 | 2 | 0 | 06 | 60000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2641 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2642 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2649 | 2 | 0 | 06 | 60000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2651 | 2 | 4 | 43 | 33320 | 000222 | 2223 | 442 | 02 | 20 | 0000000 | 4444 |
| 2659 | 2 | 0 | 06 | 60000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2670 | 2 | 0 | 06 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2671 | 2 | 4 | 40 | 66655 | 555555 | 5553 | 300 | 00 | 05 | 5555555 | 5000 |
| 2672 | 2 | 4 | 46 | 66655 | 253333 | 3330 | 000 | 04 | 40 | 0000000 | 0000 |
| 2673 | 2 | 4 | 46 | 66655 | 553333 | 3333 | 311 | 04 | 45 | 5555555 | 5550 |
| 2674 | 2 | 4 | 46 | 66655 | 553333 | 3333 | 322 | 04 | 45 | 5555555 | 5000 |
| 2675 | 2 | 4 | 46 | 66655 | 555555 | 5555 | 522 | 14 | 45 | 5555555 | 0000 |
| 2691 | 2 | 4 | 40 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2800 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2811 | 3 | 5 | 56 | 66655 | 555555 | 5533 | 333 | 04 | 40 | 1111000 | 0000 |
| 2813 | 3 | 5 | 56 | 63350 | 200002 | 2222 | 224 | 10 | 00 | 1111000 | 0244 |
| 2814 | 3 | 5 | 56 | 66650 | 300000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2818 | 3 | 5 | 56 | 66655 | 555555 | 5530 | 000 | 02 | 20 | 0000000 | 0355 |
| 2819 | 3 | 5 | 56 | 63355 | 555555 | 5555 | 555 | 24 | 44 | 2222222 | 0000 |
| 2822 | 3 | 5 | 56 | 63005 | 555555 | 5555 | 555 | 00 | 05 | 2222000 | 0000 |
| 2823 | 3 | 5 | 56 | 64455 | 555555 | 5555 | 555 | 24 | 44 | 4444444 | 0000 |
| 2825 | 3 | 5 | 55 | 43310 | 000000 | 0000 | 000 | 00 | 00 | 2222000 | 0000 |
| 2826 | 3 | 5 | 55 | 55055 | 555500 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2827 | 3 | 5 | 56 | 66655 | 555555 | 5533 | 322 | 14 | 44 | 4444444 | 4444 |
| 2828 | 3 | 5 | 56 | 65650 | 300000 | 0530 | 003 | 14 | 40 | 1111000 | 0000 |
| 2829 | 3 | 5 | 56 | 66655 | 555555 | 5555 | 555 | 24 | 43 | 4444444 | 5555 |
| 2831 | 3 | 5 | 56 | 66630 | 200000 | 0000 | 055 | 24 | 44 | 4444333 | 4000 |
| 2833 | 3 | 5 | 56 | 66655 | 555555 | 5555 | 500 | 04 | 44 | 0000000 | 5555 |
| 2834 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 05 | 4444444 | 5555 |
| 2841 | 3 | 5 | 56 | 66435 | 155544 | 4433 | 322 | 04 | 44 | 4444000 | 0000 |

Table C-1. (Continued)

| MOS | FY80 | FY81 | FY82 | FY83 | FY84 | FY85 | FY86 | FY87 | FY88 | FY89 | FY90 |
|------|------|------|------|-------|--------|------|------|------|------|---------|------|
| 2845 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2861 | 3 | 5 | 56 | 66605 | 555555 | 5555 | 555 | 24 | 44 | 0000000 | 5000 |
| 2864 | 3 | 5 | 50 | 06005 | 550005 | 5555 | 500 | 00 | 00 | 0000000 | 0000 |
| 2871 | 3 | 5 | 55 | 53650 | 000000 | 0534 | 455 | 04 | 42 | 4444000 | 0000 |
| 2874 | 3 | 5 | 56 | 66605 | 555555 | 5554 | 444 | 14 | 44 | 4444000 | 4444 |
| 2875 | 3 | 5 | 56 | 66655 | 555555 | 5555 | 533 | 04 | 40 | 0000000 | 0000 |
| 2881 | 3 | 5 | 55 | 40000 | 200000 | 0500 | 000 | 00 | 04 | 4444444 | 0550 |
| 2882 | 3 | 5 | 56 | 62005 | 555533 | 1000 | 000 | 04 | 44 | 4444444 | 0000 |
| 2884 | 3 | 5 | 56 | 63350 | 300000 | 0000 | 003 | 00 | 04 | 4444444 | 0000 |
| 2885 | 3 | 5 | 56 | 66655 | 555555 | 5555 | 555 | 24 | 43 | 4444444 | 4000 |
| 2886 | 3 | 5 | 56 | 66640 | 300000 | 0000 | 000 | 04 | 40 | 0000000 | 0000 |
| 2887 | 3 | 5 | 56 | 66630 | 003311 | 0110 | 055 | 24 | 43 | 4444444 | 4442 |
| 2888 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 2889 | 3 | 5 | 56 | 66605 | 555555 | 5555 | 533 | 14 | 40 | 0000000 | 0000 |
| 2891 | 3 | 5 | 50 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3000 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3043 | 0 | 1 | 12 | 12112 | 122333 | 3330 | 000 | 02 | 24 | 2222222 | 1110 |
| 3044 | 0 | 1 | 11 | 32333 | 133333 | 3333 | 333 | 14 | 44 | 2222222 | 5555 |
| 3051 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 04 | 0000000 | 0000 |
| 3052 | 0 | 1 | 10 | 02000 | 000002 | 2222 | 200 | 00 | 03 | 0000000 | 0000 |
| 3061 | 0 | 1 | 12 | 23130 | 100100 | 0000 | 000 | 04 | 40 | 1111111 | 2244 |
| 3072 | 0 | 1 | 10 | 00000 | 000111 | 0222 | 232 | 00 | 00 | 0000000 | 0000 |
| 3073 | 0 | 3 | 30 | 00000 | 000000 | 0000 | 020 | 00 | 01 | 0000000 | 0333 |
| 3081 | 0 | 0 | 00 | 00000 | 000100 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3100 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3111 | 0 | 2 | 20 | 00000 | 000000 | 0200 | 000 | 00 | 00 | 0000000 | 0000 |
| 3112 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3121 | 0 | 2 | 20 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3141 | 0 | 2 | 20 | 01000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3191 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3300 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3311 | 0 | 1 | 10 | 00020 | 100002 | 2222 | 223 | 12 | 23 | 0000000 | 0000 |
| 3371 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3372 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3381 | 0 | 1 | 10 | 00000 | 000012 | 2222 | 222 | 00 | 02 | 0000000 | 0000 |
| 3400 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3421 | 0 | 0 | 01 | 00000 | 000000 | 0012 | 220 | 02 | 20 | 0000000 | 0000 |
| 3431 | 0 | 0 | 01 | 00000 | 000000 | 0012 | 222 | 02 | 24 | 0000000 | 0000 |
| 3432 | 0 | 2 | 21 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3441 | 0 | 2 | 23 | 33332 | 321222 | 2222 | 334 | 14 | 44 | 0000000 | 4000 |
| 3451 | 0 | 2 | 22 | 12101 | 211111 | 0200 | 000 | 00 | 04 | 2222222 | 4455 |
| 3500 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3513 | 0 | 0 | 00 | 20001 | 113333 | 3332 | 233 | 00 | 04 | 3333333 | 0000 |
| 3521 | 0 | 0 | 00 | 00003 | 133333 | 3444 | 442 | 02 | 20 | 0000000 | 0000 |
| 3522 | 0 | 0 | 01 | 01003 | 133333 | 3444 | 442 | 02 | 22 | 4444444 | 3344 |
| 3523 | 0 | 2 | 23 | 31003 | 133333 | 3444 | 442 | 12 | 22 | 4444444 | 3331 |
| 3524 | 0 | 0 | 00 | 01103 | 133333 | 3444 | 442 | 02 | 22 | 4444444 | 3332 |
| 3529 | 0 | 0 | 03 | 10000 | 000000 | 0004 | 400 | 00 | 00 | 0000000 | 0000 |
| 3531 | 0 | 0 | 00 | 00000 | 000000 | 0222 | 222 | 02 | 22 | 0000000 | 0000 |
| 3533 | 0 | 0 | 02 | 31000 | 000000 | 0222 | 222 | 12 | 23 | 4444444 | 4440 |
| 3534 | 0 | 0 | 02 | 33200 | 000000 | 0222 | 222 | 12 | 23 | 0000000 | 0000 |
| 3535 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 3537 | 0 | 0 | 03 | 10000 | 000000 | 0000 | 000 | 00 | 03 | 0000000 | 0000 |

Table C-1. (Continued)

| MOS | FY80 | FY81 | FY82 | FY83 | FY84 | FY85 | FY86 | FY87 | FY88 | FY89 | FY90 |
|------|------|------|------|-------|--------|------|------|------|------|---------|------|
| 4000 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4016 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4034 | 3 | 5 | 54 | 42000 | 000000 | 0022 | 233 | 14 | 42 | 0000000 | 0244 |
| 4038 | 3 | 5 | 56 | 63202 | 021111 | 1333 | 333 | 10 | 00 | 0000000 | 0000 |
| 4041 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 003 | 10 | 03 | 2222000 | 0000 |
| 4063 | 3 | 5 | 56 | 62002 | 020000 | 0000 | 000 | 02 | 25 | 2222000 | 0000 |
| 4065 | 3 | 5 | 56 | 64100 | 000000 | 0000 | 024 | 10 | 00 | 0000000 | 0000 |
| 4069 | 3 | 5 | 56 | 66442 | 223333 | 3333 | 333 | 14 | 42 | 4444000 | 0000 |
| 4071 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 04 | 2222000 | 0000 |
| 4100 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4111 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4131 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4132 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4300 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4312 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4313 | 0 | 1 | 13 | 33333 | 333333 | 3333 | 334 | 13 | 34 | 4444444 | 3330 |
| 4321 | 0 | 1 | 13 | 33333 | 333333 | 3333 | 334 | 13 | 34 | 4444444 | 4444 |
| 4322 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4391 | 0 | 1 | 10 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4400 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4421 | 2 | 2 | 20 | 00221 | 110000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4422 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4423 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4425 | 2 | 0 | 00 | 00000 | 000000 | 0020 | 332 | 13 | 30 | 0000000 | 0000 |
| 4429 | 0 | 2 | 26 | 66655 | 555555 | 5555 | 555 | 23 | 30 | 0000000 | 0000 |
| 4449 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4600 | 1 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4611 | 1 | 1 | 10 | 01132 | 220000 | 0000 | 000 | 04 | 40 | 0000000 | 0000 |
| 4621 | 1 | 2 | 20 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4631 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4641 | 1 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4642 | 1 | 1 | 10 | 03333 | 333333 | 3322 | 222 | 02 | 23 | 2222222 | 0355 |
| 4651 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4652 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4653 | 1 | 1 | 11 | 13333 | 332222 | 2222 | 220 | 03 | 32 | 4444444 | 3330 |
| 4671 | 1 | 1 | 10 | 01323 | 332222 | 2322 | 222 | 13 | 33 | 1111111 | 1110 |
| 4672 | 1 | 2 | 23 | 36653 | 333333 | 3333 | 323 | 13 | 30 | 0000000 | 0000 |
| 4673 | 1 | 1 | 10 | 02003 | 332333 | 3333 | 300 | 00 | 00 | 0000000 | 0000 |
| 4675 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 4691 | 1 | 1 | 10 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5500 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5519 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5521 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5523 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5526 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5528 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5534 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5536 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5537 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5541 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5543 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5544 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5546 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |

Table C-1. (Continued)

| MOS | FY80 | FY81 | FY82 | FY83 | FY84 | FY85 | FY86 | FY87 | FY88 | FY89 | FY90 |
|------|------|------|------|-------|--------|------|------|------|------|---------|------|
| 5547 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5563 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5565 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5571 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5574 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5576 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5577 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5579 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5592 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5593 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5700 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5711 | 0 | 2 | 24 | 44333 | 333333 | 2222 | 022 | 11 | 13 | 4444444 | 5555 |
| 5800 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5811 | 2 | 3 | 31 | 00000 | 000000 | 0221 | 022 | 02 | 20 | 0000000 | 0000 |
| 5812 | 2 | 0 | 03 | 30000 | 002222 | 2221 | 022 | 03 | 30 | 0000000 | 3330 |
| 5813 | 2 | 3 | 32 | 20000 | 000011 | 1221 | 000 | 03 | 34 | 2222222 | 0330 |
| 5821 | 2 | 3 | 33 | 30000 | 003333 | 0222 | 222 | 12 | 24 | 4444444 | 4444 |
| 5822 | 2 | 3 | 30 | 06000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5831 | 2 | 0 | 00 | 00000 | 100001 | 1222 | 222 | 11 | 12 | 0000000 | 0000 |
| 5832 | 2 | 3 | 31 | 10000 | 100000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5900 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5921 | 4 | 6 | 66 | 65655 | 555555 | 5535 | 500 | 00 | 04 | 3333000 | 0000 |
| 5922 | 4 | 6 | 66 | 55655 | 555555 | 5535 | 500 | 00 | 04 | 2333000 | 0000 |
| 5923 | 4 | 6 | 66 | 65655 | 555555 | 5535 | 500 | 00 | 04 | 0000000 | 0000 |
| 5924 | 4 | 6 | 66 | 66655 | 555555 | 5535 | 533 | 04 | 44 | 2222000 | 5000 |
| 5925 | 4 | 6 | 66 | 66655 | 555555 | 5555 | 555 | 24 | 44 | 4444000 | 4000 |
| 5926 | 4 | 6 | 66 | 66655 | 555555 | 5555 | 555 | 24 | 40 | 0000000 | 0000 |
| 5927 | 4 | 6 | 66 | 66655 | 555555 | 5555 | 555 | 24 | 44 | 4444000 | 0000 |
| 5928 | 4 | 6 | 66 | 66655 | 555555 | 5555 | 555 | 20 | 04 | 0000000 | 0000 |
| 5929 | 4 | 6 | 66 | 50655 | 455555 | 5533 | 333 | 00 | 04 | 0000000 | 0000 |
| 5936 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5937 | 4 | 6 | 66 | 65555 | 555555 | 5555 | 555 | 04 | 44 | 0000000 | 0000 |
| 5938 | 4 | 6 | 66 | 64000 | 000000 | 0000 | 000 | 04 | 44 | 2222222 | 5555 |
| 5939 | 4 | 6 | 66 | 66655 | 555555 | 5553 | 532 | 00 | 04 | 4444444 | 0000 |
| 5942 | 4 | 6 | 66 | 66655 | 555555 | 5550 | 035 | 04 | 44 | 2222000 | 0000 |
| 5943 | 4 | 6 | 66 | 64600 | 000005 | 5530 | 003 | 14 | 44 | 4444444 | 0000 |
| 5944 | 4 | 6 | 66 | 44655 | 155555 | 5554 | 430 | 04 | 44 | 4444444 | 5555 |
| 5945 | 4 | 6 | 66 | 66645 | 455555 | 5534 | 533 | 04 | 44 | 4444444 | 0220 |
| 5947 | 4 | 6 | 66 | 66655 | 555555 | 5555 | 500 | 04 | 44 | 4444000 | 0000 |
| 5948 | 4 | 6 | 66 | 66655 | 555555 | 5555 | 555 | 24 | 44 | 4444000 | 5000 |
| 5952 | 4 | 6 | 66 | 42050 | 000000 | 0000 | 000 | 04 | 44 | 0000000 | 0000 |
| 5953 | 4 | 6 | 66 | 66655 | 055555 | 5555 | 555 | 24 | 44 | 4444444 | 0000 |
| 5954 | 4 | 6 | 66 | 62250 | 000000 | 0000 | 000 | 04 | 44 | 3333000 | 0000 |
| 5955 | 4 | 6 | 64 | 30050 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5956 | 4 | 6 | 66 | 50050 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5957 | 4 | 6 | 66 | 65250 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5958 | 4 | 6 | 66 | 60050 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5959 | 4 | 6 | 60 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5962 | 4 | 6 | 66 | 60005 | 055555 | 3335 | 553 | 14 | 44 | 0000000 | 0000 |
| 5963 | 4 | 6 | 66 | 40005 | 055555 | 3325 | 553 | 04 | 44 | 4444444 | 0000 |

Table C-1. (Continued)

| MOS | FY80 | FY81 | FY82 | FY83 | FY84 | FY85 | FY86 | FY87 | FY88 | FY89 | FY90 |
|------|------|------|------|-------|--------|------|------|------|------|---------|------|
| 5964 | 4 | 6 | 66 | 60025 | 455555 | 5555 | 555 | 24 | 44 | 4444000 | 0000 |
| 5974 | 4 | 6 | 66 | 66655 | 555555 | 5555 | 555 | 04 | 44 | 0000000 | 0000 |
| 5977 | 4 | 6 | 66 | 66655 | 555555 | 5555 | 555 | 24 | 44 | 4444444 | 0000 |
| 5978 | 4 | 6 | 66 | 66655 | 555555 | 5555 | 555 | 24 | 44 | 4444000 | 0000 |
| 5979 | 4 | 6 | 66 | 66655 | 555555 | 5555 | 555 | 24 | 44 | 4444000 | 5000 |
| 5982 | 4 | 6 | 66 | 66635 | 555500 | 0530 | 003 | 04 | 44 | 4444444 | 5554 |
| 5993 | 4 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 5994 | 4 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6000 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6011 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6012 | 0 | 1 | 10 | 01002 | 024444 | 4420 | 000 | 02 | 20 | 0000000 | 4000 |
| 6013 | 0 | 1 | 10 | 01002 | 024444 | 4442 | 220 | 02 | 22 | 0000000 | 0000 |
| 6014 | 0 | 1 | 13 | 31002 | 024444 | 4420 | 030 | 02 | 20 | 0000000 | 0000 |
| 6015 | 0 | 1 | 10 | 01002 | 024444 | 4422 | 221 | 03 | 33 | 3333333 | 0000 |
| 6016 | 0 | 0 | 00 | 01002 | 024444 | 4420 | 003 | 12 | 24 | 4444444 | 4422 |
| 6017 | 0 | 1 | 13 | 31002 | 024444 | 4442 | 231 | 04 | 40 | 1111000 | 0000 |
| 6018 | 0 | 0 | 03 | 31002 | 020000 | 0000 | 002 | 04 | 44 | 4444333 | 4455 |
| 6019 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6022 | 0 | 1 | 10 | 01000 | 000004 | 4430 | 022 | 03 | 33 | 0000000 | 0000 |
| 6023 | 0 | 0 | 03 | 31003 | 034444 | 4432 | 222 | 02 | 22 | 3333000 | 0355 |
| 6024 | 0 | 1 | 13 | 31000 | 003344 | 4430 | 022 | 04 | 44 | 0000000 | 0000 |
| 6025 | 0 | 0 | 02 | 21003 | 033334 | 4432 | 200 | 02 | 24 | 4444444 | 5442 |
| 6026 | 0 | 1 | 13 | 31000 | 000000 | 0032 | 223 | 03 | 34 | 0000000 | 0055 |
| 6027 | 0 | 1 | 13 | 31003 | 034444 | 4432 | 233 | 04 | 44 | 4444444 | 5555 |
| 6028 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6031 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6032 | 0 | 1 | 13 | 33335 | 555555 | 5555 | 555 | 24 | 44 | 3333000 | 0000 |
| 6035 | 0 | 1 | 10 | 36655 | 553311 | 0111 | 003 | 04 | 44 | 4444444 | 5555 |
| 6036 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6038 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6041 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6042 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6044 | 0 | 1 | 11 | 14655 | 555555 | 5555 | 444 | 14 | 44 | 4444000 | 0355 |
| 6046 | 0 | 1 | 12 | 22232 | 224444 | 4433 | 344 | 10 | 05 | 4444222 | 4220 |
| 6047 | 0 | 1 | 13 | 33454 | 544444 | 4443 | 334 | 13 | 35 | 4444444 | 5555 |
| 6051 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6052 | 0 | 1 | 10 | 01000 | 002234 | 4420 | 000 | 04 | 40 | 0000000 | 0000 |
| 6053 | 0 | 1 | 10 | 01000 | 002334 | 4420 | 000 | 03 | 34 | 1111111 | 0000 |
| 6054 | 0 | 0 | 03 | 30000 | 002255 | 4420 | 000 | 04 | 43 | 0000000 | 0000 |
| 6055 | 0 | 1 | 10 | 01001 | 010234 | 4430 | 000 | 04 | 43 | 4444444 | 5550 |
| 6056 | 0 | 0 | 02 | 00000 | 000000 | 0000 | 055 | 24 | 43 | 4444444 | 5000 |
| 6057 | 0 | 1 | 10 | 01003 | 035555 | 4440 | 000 | 04 | 43 | 4444444 | 0440 |
| 6058 | 0 | 1 | 11 | 11000 | 000000 | 0000 | 003 | 04 | 44 | 4444222 | 0000 |
| 6059 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6060 | 0 | 1 | 11 | 12101 | 014444 | 4543 | 344 | 04 | 44 | 4444444 | 4444 |
| 6061 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6062 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6064 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6067 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6071 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6072 | 0 | 1 | 13 | 32222 | 323333 | 3443 | 332 | 04 | 44 | 2222000 | 0000 |
| 6073 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 2222000 | 0000 |
| 6075 | 0 | 1 | 13 | 30100 | 002233 | 3443 | 332 | 04 | 42 | 2222222 | 0220 |

Table C-1. (Continued)

| MOS | FY80 | FY81 | FY82 | FY83 | FY84 | FY85 | FY86 | FY87 | FY88 | FY89 | FY90 |
|------|------|------|------|-------|--------|------|------|------|------|---------|------|
| 6076 | 0 | 1 | 13 | 30213 | 334444 | 4420 | 033 | 03 | 33 | 0000000 | 0000 |
| 6077 | 0 | 1 | 13 | 32220 | 000222 | 2420 | 033 | 04 | 42 | 0000000 | 0000 |
| 6078 | 0 | 1 | 13 | 33300 | 000012 | 2423 | 333 | 04 | 44 | 0000000 | 0000 |
| 6079 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6081 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6082 | 0 | 0 | 03 | 30000 | 000000 | 0002 | 212 | 14 | 40 | 0000000 | 5000 |
| 6083 | 0 | 1 | 13 | 30003 | 032335 | 5420 | 000 | 04 | 43 | 1111000 | 0000 |
| 6084 | 0 | 1 | 13 | 30000 | 000055 | 5420 | 000 | 04 | 43 | 0000000 | 0000 |
| 6085 | 0 | 1 | 13 | 30000 | 000005 | 5420 | 000 | 02 | 24 | 3333000 | 0000 |
| 6086 | 0 | 0 | 00 | 00000 | 003335 | 5420 | 002 | 00 | 00 | 2222222 | 0000 |
| 6087 | 0 | 1 | 10 | 00003 | 033355 | 5440 | 021 | 04 | 43 | 2222000 | 0000 |
| 6088 | 0 | 1 | 11 | 10000 | 003315 | 5420 | 000 | 00 | 05 | 2222000 | 0220 |
| 6089 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6090 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6091 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6092 | 0 | 1 | 10 | 00000 | 003334 | 4530 | 000 | 03 | 30 | 2222222 | 4000 |
| 6093 | 0 | 1 | 11 | 10000 | 003344 | 4530 | 000 | 04 | 44 | 4444444 | 5553 |
| 6094 | 0 | 1 | 10 | 00000 | 003344 | 4530 | 000 | 01 | 13 | 0000000 | 0000 |
| 6095 | 0 | 1 | 10 | 00000 | 000014 | 4530 | 000 | 00 | 05 | 4444444 | 4442 |
| 6096 | 0 | 1 | 11 | 00000 | 000114 | 4530 | 003 | 14 | 44 | 4444444 | 5000 |
| 6097 | 0 | 1 | 13 | 30003 | 033444 | 4540 | 004 | 13 | 33 | 4444333 | 0440 |
| 6098 | 0 | 1 | 11 | 00000 | 003324 | 4542 | 200 | 04 | 45 | 4444444 | 5550 |
| 6100 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6111 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6112 | 2 | 0 | 00 | 00122 | 120000 | 0000 | 000 | 04 | 40 | 1111000 | 4000 |
| 6113 | 2 | 0 | 00 | 00122 | 120211 | 1530 | 000 | 04 | 40 | 1111111 | 4000 |
| 6114 | 2 | 0 | 00 | 01322 | 123333 | 3533 | 320 | 02 | 21 | 4444444 | 4000 |
| 6115 | 2 | 3 | 30 | 01132 | 125555 | 5544 | 400 | 00 | 02 | 0000000 | 4000 |
| 6119 | 2 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6122 | 2 | 3 | 33 | 31104 | 444444 | 4444 | 400 | 02 | 23 | 0000000 | 4000 |
| 6123 | 2 | 3 | 33 | 31104 | 444444 | 4444 | 400 | 01 | 12 | 0000000 | 0000 |
| 6124 | 2 | 0 | 00 | 01104 | 444444 | 4444 | 400 | 00 | 00 | 0000000 | 0000 |
| 6125 | 2 | 3 | 33 | 31104 | 440000 | 0000 | 000 | 00 | 03 | 3333333 | 4440 |
| 6132 | 2 | 0 | 00 | 00113 | 431222 | 2210 | 000 | 02 | 20 | 0000000 | 0000 |
| 6135 | 2 | 3 | 30 | 34445 | 555555 | 5544 | 444 | 14 | 45 | 0000000 | 0000 |
| 6142 | 2 | 3 | 31 | 00000 | 000000 | 0220 | 000 | 04 | 43 | 3333333 | 4000 |
| 6143 | 2 | 3 | 33 | 30000 | 000222 | 2220 | 022 | 02 | 23 | 3333333 | 4455 |
| 6144 | 2 | 3 | 30 | 00000 | 000222 | 2220 | 000 | 04 | 43 | 4444444 | 4455 |
| 6152 | 2 | 3 | 30 | 01103 | 330000 | 0430 | 000 | 04 | 44 | 3333333 | 4440 |
| 6153 | 2 | 0 | 01 | 10003 | 335555 | 5430 | 023 | 04 | 40 | 0000000 | 0000 |
| 6154 | 2 | 0 | 00 | 01103 | 331222 | 2420 | 003 | 14 | 44 | 4444444 | 4455 |
| 6155 | 2 | 3 | 30 | 01103 | 335555 | 5423 | 300 | 00 | 00 | 0000000 | 0000 |
| 6159 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6172 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0002000 | 4440 |
| 6173 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0002000 | 4442 |
| 6174 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0002044 | 4440 |
| 6175 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0002000 | 4444 |
| 6300 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6311 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6312 | 2 | 2 | 23 | 34334 | 442344 | 2244 | 000 | 04 | 40 | 0000000 | 0000 |
| 6313 | 2 | 2 | 23 | 14334 | 442222 | 1530 | 000 | 01 | 10 | 0000000 | 0000 |
| 6314 | 2 | 2 | 26 | 64334 | 442255 | 5530 | 000 | 04 | 44 | 0000000 | 5000 |
| 6315 | 2 | 2 | 20 | 04334 | 442222 | 2530 | 000 | 00 | 00 | 2222220 | 0000 |

Table C-1. (Continued)

| MOS | FY80 | FY81 | FY82 | FY83 | FY84 | FY85 | FY86 | FY87 | FY88 | FY89 | FY90 |
|------|------|------|------|-------|--------|------|------|------|------|---------|------|
| 6316 | 2 | 2 | 20 | 04334 | 445555 | 5530 | 000 | 02 | 24 | 4444444 | 5000 |
| 6317 | 2 | 2 | 26 | 64334 | 445555 | 5542 | 200 | 00 | 00 | 4444444 | 0000 |
| 6318 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000002 | 3000 |
| 6322 | 2 | 2 | 23 | 35655 | 552222 | 2530 | 023 | 14 | 44 | 0000000 | 0000 |
| 6323 | 2 | 2 | 23 | 35655 | 554444 | 3530 | 000 | 04 | 44 | 2222222 | 0000 |
| 6324 | 2 | 2 | 23 | 35655 | 554444 | 3530 | 000 | 00 | 04 | 4444443 | 5555 |
| 6331 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6332 | 2 | 2 | 20 | 02204 | 243355 | 5554 | 000 | 02 | 20 | 0000000 | 0000 |
| 6333 | 2 | 2 | 23 | 32204 | 243335 | 5530 | 000 | 02 | 24 | 3333333 | 0000 |
| 6334 | 2 | 2 | 26 | 62204 | 243355 | 5554 | 254 | 02 | 20 | 0000000 | 0000 |
| 6335 | 2 | 2 | 20 | 02204 | 243355 | 5544 | 000 | 01 | 14 | 2222222 | 0000 |
| 6336 | 2 | 0 | 01 | 10004 | 243335 | 5530 | 000 | 00 | 04 | 4444444 | 0110 |
| 6337 | 2 | 2 | 26 | 62204 | 244555 | 5554 | 400 | 00 | 00 | 0000000 | 0000 |
| 6342 | 2 | 2 | 21 | 13454 | 545555 | 5540 | 020 | 02 | 23 | 0000000 | 0000 |
| 6343 | 2 | 2 | 21 | 13454 | 545555 | 5540 | 002 | 03 | 33 | 0000000 | 0000 |
| 6344 | 2 | 2 | 23 | 33454 | 542222 | 2530 | 000 | 04 | 44 | 4444444 | 0000 |
| 6345 | 2 | 0 | 00 | 03454 | 542222 | 2555 | 533 | 00 | 00 | 0000000 | 0000 |
| 6351 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6352 | 2 | 2 | 23 | 35655 | 553333 | 3333 | 335 | 20 | 00 | 4444444 | 5000 |
| 6353 | 2 | 2 | 23 | 35655 | 555555 | 5554 | 302 | 02 | 24 | 0000000 | 0000 |
| 6354 | 2 | 2 | 23 | 35655 | 553355 | 5530 | 000 | 02 | 24 | 0000000 | 0000 |
| 6355 | 2 | 2 | 20 | 05655 | 555555 | 5533 | 302 | 01 | 14 | 0000000 | 0000 |
| 6357 | 2 | 2 | 23 | 35655 | 555555 | 5543 | 300 | 00 | 00 | 0000000 | 0000 |
| 6359 | 2 | 2 | 23 | 35655 | 555555 | 5555 | 500 | 00 | 00 | 0000000 | 0000 |
| 6362 | 2 | 2 | 20 | 02055 | 555555 | 5530 | 000 | 00 | 00 | 0000000 | 0000 |
| 6363 | 2 | 2 | 23 | 33355 | 555555 | 5530 | 000 | 02 | 20 | 0000000 | 0000 |
| 6364 | 2 | 2 | 22 | 20005 | 255555 | 5555 | 531 | 01 | 14 | 4444444 | 0000 |
| 6365 | 2 | 2 | 23 | 20003 | 033333 | 3530 | 000 | 01 | 10 | 4444444 | 0000 |
| 6367 | 2 | 2 | 23 | 36655 | 553555 | 5555 | 555 | 00 | 01 | 0000000 | 0000 |
| 6371 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6372 | 2 | 2 | 23 | 33335 | 554444 | 4420 | 000 | 00 | 01 | 4444444 | 0000 |
| 6374 | 2 | 2 | 23 | 33335 | 253311 | 1000 | 033 | 04 | 44 | 4444444 | 5000 |
| 6386 | 2 | 2 | 23 | 30000 | 100000 | 0000 | 000 | 01 | 10 | 0000000 | 0000 |
| 6391 | 2 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6400 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6412 | 2 | 2 | 23 | 34654 | 543311 | 0000 | 000 | 00 | 20 | 0000000 | 0330 |
| 6413 | 2 | 2 | 23 | 34654 | 544444 | 4433 | 333 | 02 | 20 | 0000000 | 0000 |
| 6414 | 2 | 2 | 23 | 33324 | 544444 | 4430 | 000 | 00 | 40 | 0000000 | 0000 |
| 6415 | 2 | 2 | 23 | 36654 | 543333 | 2000 | 002 | 00 | 00 | 0000000 | 0000 |
| 6416 | 2 | 2 | 23 | 35554 | 545555 | 5540 | 000 | 00 | 00 | 0000000 | 0000 |
| 6422 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6423 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 04 | 4444444 | 5555 |
| 6432 | 2 | 2 | 22 | 26655 | 555555 | 5554 | 231 | 02 | 40 | 0000000 | 0000 |
| 6433 | 2 | 2 | 23 | 35655 | 555555 | 5554 | 330 | 03 | 30 | 0000000 | 0000 |
| 6434 | 2 | 2 | 23 | 34232 | 224444 | 4040 | 000 | 04 | 40 | 0000000 | 0000 |
| 6435 | 2 | 2 | 23 | 34335 | 555555 | 5542 | 200 | 02 | 20 | 0000000 | 0000 |
| 6442 | 2 | 2 | 23 | 30000 | 000000 | 0000 | 003 | 02 | 20 | 0000000 | 0000 |
| 6443 | 2 | 2 | 23 | 33100 | 003311 | 1021 | 100 | 00 | 00 | 0000000 | 0000 |
| 6444 | 2 | 0 | 03 | 30020 | 003333 | 3120 | 000 | 00 | 00 | 0000000 | 0000 |
| 6445 | 2 | 2 | 23 | 34300 | 003333 | 2220 | 000 | 03 | 30 | 0000000 | 0000 |
| 6446 | 2 | 0 | 03 | 30002 | 223333 | 2232 | 000 | 00 | 00 | 0000000 | 0000 |
| 6452 | 2 | 2 | 21 | 00025 | 555544 | 4443 | 200 | 04 | 40 | 0000000 | 0000 |
| 6453 | 2 | 2 | 21 | 10035 | 555544 | 4430 | 000 | 03 | 30 | 0000000 | 0000 |

Table C-1. (Continued)

| MOS | FY80 | FY81 | FY82 | FY83 | FY84 | FY85 | FY86 | FY87 | FY88 | FY89 | FY90 |
|------|------|------|------|-------|--------|------|------|------|------|---------|------|
| 6454 | 2 | 2 | 21 | 13005 | 555544 | 3310 | 000 | 00 | 00 | 0000000 | 0000 |
| 6455 | 2 | 0 | 02 | 10000 | 003333 | 2000 | 000 | 04 | 40 | 0000000 | 0000 |
| 6462 | 2 | 2 | 20 | 06605 | 055555 | 5555 | 555 | 24 | 44 | 4444444 | 5000 |
| 6463 | 2 | 0 | 00 | 00005 | 555555 | 5555 | 555 | 24 | 44 | 4444444 | 5553 |
| 6464 | 2 | 0 | 00 | 00000 | 005555 | 5555 | 555 | 24 | 42 | 4444444 | 5550 |
| 6465 | 2 | 2 | 22 | 26635 | 555555 | 5555 | 555 | 24 | 44 | 4444444 | 5555 |
| 6466 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 34 | 2222000 | 0000 |
| 6467 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 30 | 0000000 | 0000 |
| 6468 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 05 | 4444444 | 3330 |
| 6469 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 40 | 0000000 | 0000 |
| 6472 | 2 | 0 | 00 | 00135 | 455555 | 5552 | 000 | 00 | 00 | 0000000 | 0000 |
| 6473 | 2 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6474 | 2 | 0 | 03 | 30123 | 134422 | 2000 | 030 | 04 | 40 | 0000000 | 0000 |
| 6475 | 2 | 2 | 21 | 11105 | 555533 | 2000 | 000 | 02 | 20 | 4444444 | 0000 |
| 6476 | 2 | 0 | 00 | 00015 | 555555 | 5555 | 555 | 22 | 20 | 4444444 | 0000 |
| 6477 | 2 | 2 | 22 | 16655 | 555555 | 5555 | 512 | 03 | 30 | 0000000 | 0000 |
| 6478 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 40 | 0000000 | 0000 |
| 6482 | 2 | 2 | 23 | 36205 | 555555 | 5555 | 522 | 04 | 40 | 2222000 | 0000 |
| 6483 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 45 | 4444444 | 5555 |
| 6484 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 40 | 0000000 | 0000 |
| 6485 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 40 | 0000000 | 0000 |
| 6492 | 2 | 2 | 23 | 35524 | 545544 | 3441 | 122 | 00 | 00 | 4444444 | 5555 |
| 6493 | 2 | 2 | 23 | 36655 | 555555 | 5444 | 420 | 00 | 00 | 0000000 | 0000 |
| 6500 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6511 | 3 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6521 | 3 | 3 | 33 | 30000 | 004444 | 4444 | 444 | 14 | 43 | 3333333 | 4000 |
| 6531 | 3 | 3 | 30 | 00054 | 544444 | 4440 | 000 | 04 | 45 | 3333333 | 4440 |
| 6532 | 3 | 0 | 03 | 36654 | 542224 | 4420 | 000 | 02 | 20 | 0000000 | 0000 |
| 6533 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6534 | 3 | 0 | 01 | 16554 | 544444 | 4420 | 000 | 04 | 40 | 0000000 | 0000 |
| 6535 | 3 | 0 | 02 | 23654 | 542455 | 5533 | 300 | 00 | 00 | 0000000 | 0000 |
| 6536 | 3 | 0 | 03 | 36654 | 545555 | 5532 | 200 | 03 | 30 | 0000000 | 0000 |
| 6537 | 3 | 0 | 03 | 36554 | 545555 | 5543 | 333 | 02 | 20 | 0000000 | 0000 |
| 6538 | 3 | 0 | 03 | 32400 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6541 | 3 | 0 | 03 | 33653 | 535555 | 5442 | 233 | 04 | 45 | 0000000 | 0000 |
| 6542 | 3 | 0 | 03 | 34653 | 535555 | 5430 | 005 | 02 | 20 | 0000000 | 0000 |
| 6591 | 3 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6800 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6821 | 0 | 0 | 03 | 33323 | 431100 | 0000 | 000 | 02 | 20 | 3333333 | 0000 |
| 6822 | 0 | 0 | 03 | 33103 | 430000 | 0000 | 000 | 02 | 20 | 0000000 | 0000 |
| 6831 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 6842 | 0 | 0 | 00 | 00033 | 530000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 7000 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 7011 | 0 | 0 | 00 | 00000 | 001111 | 1100 | 000 | 00 | 03 | 2222000 | 4000 |
| 7041 | 0 | 0 | 00 | 00112 | 224444 | 4444 | 444 | 01 | 14 | 0000000 | 4440 |
| 7051 | 0 | 0 | 01 | 10001 | 012222 | 2333 | 344 | 12 | 23 | 0000000 | 0000 |
| 7200 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 7212 | 3 | 4 | 45 | 53654 | 544444 | 4420 | 002 | 12 | 24 | 4444444 | 0000 |
| 7221 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 7222 | 3 | 4 | 45 | 56655 | 555555 | 5500 | 000 | 00 | 02 | 4444222 | 0000 |
| 7231 | 3 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 7234 | 3 | 4 | 41 | 14450 | 300000 | 0002 | 200 | 04 | 44 | 0000000 | 0000 |
| 7236 | 3 | 4 | 45 | 54455 | 354444 | 4544 | 444 | 14 | 43 | 4444444 | 5550 |

Table C-1. (Continued)

| MCS | FY80 | FY81 | FY82 | FY83 | FY84 | FY85 | FY86 | FY87 | FY88 | FY89 | FY90 |
|------|------|------|------|-------|--------|------|------|------|------|---------|------|
| 7239 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 7241 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 7242 | 3 | 4 | 41 | 13455 | 553333 | 3100 | 002 | 04 | 44 | 0000000 | 0000 |
| 7300 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 7311 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 7312 | 4 | 6 | 66 | 66655 | 555555 | 5544 | 444 | 14 | 44 | 4444444 | 5555 |
| 7322 | 4 | 6 | 66 | 66655 | 555555 | 4530 | 000 | 04 | 43 | 4444444 | 5555 |
| 7324 | 4 | 0 | 06 | 60000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 7371 | 4 | 4 | 46 | 60000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 7372 | 4 | 6 | 66 | 66555 | 355555 | 4322 | 200 | 00 | 05 | 4444444 | 5555 |
| 7381 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 7382 | 4 | 0 | 03 | 02115 | 555555 | 5533 | 222 | 00 | 04 | 4444444 | 5555 |
| 9811 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 9900 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 9971 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 9991 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |
| 9999 | 0 | 0 | 00 | 00000 | 000000 | 0000 | 000 | 00 | 00 | 0000000 | 0000 |

NOTE: Time periods for SRB levels (divided as above roughly within the fiscal years) are as follows:

FY 1980 791001 to 800530
FY 1981 800531 to 810214
FY 1982 810215 to 811001
811002 to 820214
FY 1983 820215 to 821101
821102 to 821215
821216 to 830220
830301 to 830430
830501 to 830914
FY 1984 830915 to 831130
831201 to 840131
840201 to 840331
840401 to 840630
840701 to 840731
840801 to 840914
FY 1985 840915 to 841031
841101 to 850131
850201 to 850414
850415 to 850716
FY 1986 850717 to 851216
851217 to 860430
860501 to 860831
FY 1987 860901 to 861207
861208 to 870514
FY 1988 870515 to 880131
880201 to 881120

FY 1989 881121 to 890209
890210 to 890312
890313 to 890531
890601 to 890630
890701 to 890706
890707 to 890814
890815 to 890930
FY 1990 890931 to 900207
900208 to 900503
900504 to 900603
900604 to 900930

The SRB program was suspended, because the Marine Corps ran out of funds, between the following dates:

820702 to 820910
830601 to 830811
841001 to 841019
851001 to 851114
870615 to 870930
880715 to 880930

Table C-2. SAS listing of reenlistment length, by SRB level

DEC_FY=80

| SRB LEVEL | | REEN LENGTH | | | | | |
|--|-----------------------------|---------------------------------|---------------------------------|------------------------------|-------------------------------|----------------|--|
| FREQUENCY PERCENT ROW PCT COL PCT | | | | | | | |
| | 2 | 3 | 4 | 5 | 6 | TOTAL | |
| | | | | | | | |
| 0 | 82 1.49 1.91 89.13 | 1797 32.58 41.80 86.85 | 2037 36.93 47.38 79.76 | 74 1.34 1.72 44.58 | 309 5.60 7.19 48.66 | 4299 77.94 | |
| 1 | 9 0.16 2.00 9.78 | 189 3.43 41.91 9.13 | 198 3.59 43.90 7.75 | 10 0.18 2.22 6.02 | 45 0.82 9.98 7.09 | 451 8.18 | |
| 2 | 0 0.00 0.00 0.00 | 61 1.11 17.23 2.95 | 168 3.05 47.46 6.58 | 29 0.53 8.19 17.47 | 96 1.74 27.12 15.12 | 354 6.42 | |
| 3 | 1 0.02 0.40 1.09 | 14 0.25 5.56 0.68 | 94 1.70 37.30 3.68 | 22 0.40 8.73 13.25 | 121 2.19 48.02 19.06 | 252 4.57 | |
| 4 | 0 0.00 0.00 0.00 | 6 0.11 7.14 0.29 | 28 0.51 33.33 1.10 | 21 0.38 25.00 12.65 | 29 0.53 34.52 4.57 | 84 1.52 | |
| 5 | 0 0.00 0.00 0.00 | 1 0.02 2.56 0.05 | 14 0.25 35.90 0.55 | 3 0.05 7.69 1.81 | 21 0.38 53.85 3.31 | 39 0.71 | |
| 6 | 0 0.00 0.00 0.00 | 1 0.02 2.70 0.05 | 15 0.27 40.54 0.59 | 7 0.13 18.92 4.22 | 14 0.25 37.84 2.20 | 37 0.67 | |
| TOTAL | 92 1.67 | 2069 37.51 | 2554 46.30 | 166 3.01 | 635 11.51 | 5516 100.00 | |

Table C-2. (Continued)

DEC_FY=81

| SRB LEVEL | | REEN LENGTH | | | | | |
|--|-------|-------------|-------|-------|-------|--------|-------|
| FREQUENCY PERCENT ROW PCT COL PCT | | 2 | 3 | 4 | 5 | 6 | TOTAL |
| 0 | 57 | 1571 | 1468 | 120 | 558 | 3774 | |
| | 0.76 | 20.83 | 19.46 | 1.59 | 7.40 | 50.03 | |
| | 1.51 | 41.63 | 38.90 | 3.18 | 14.79 | | |
| | 79.17 | 67.51 | 46.56 | 24.90 | 36.98 | | |
| 1 | 9 | 495 | 839 | 75 | 342 | 1760 | |
| | 0.12 | 6.56 | 11.12 | 0.99 | 4.53 | 23.33 | |
| | 0.51 | 28.13 | 47.67 | 4.26 | 19.43 | | |
| | 12.50 | 21.27 | 26.61 | 15.56 | 22.66 | | |
| 2 | 5 | 138 | 376 | 59 | 263 | 841 | |
| | 0.07 | 1.83 | 4.98 | 0.78 | 3.49 | 11.15 | |
| | 0.59 | 16.41 | 44.71 | 7.02 | 31.27 | | |
| | 6.94 | 5.93 | 11.93 | 12.24 | 17.43 | | |
| 3 | 1 | 54 | 144 | 33 | 253 | 485 | |
| | 0.01 | 0.72 | 1.91 | 0.44 | 3.35 | 6.43 | |
| | 0.21 | 11.13 | 29.69 | 6.80 | 52.16 | | |
| | 1.39 | 2.32 | 4.57 | 6.85 | 16.77 | | |
| 4 | 0 | 9 | 58 | 20 | 40 | 127 | |
| | 0.00 | 0.12 | 0.77 | 0.27 | 0.53 | 1.68 | |
| | 0.00 | 7.09 | 45.67 | 15.75 | 31.50 | | |
| | 0.00 | 0.39 | 1.84 | 4.15 | 2.65 | | |
| 5 | 0 | 32 | 161 | 117 | 47 | 357 | |
| | 0.00 | 0.42 | 2.13 | 1.55 | 0.62 | 4.73 | |
| | 0.00 | 8.96 | 45.10 | 32.77 | 13.17 | | |
| | 0.00 | 1.38 | 5.11 | 24.27 | 3.11 | | |
| 6 | 0 | 28 | 107 | 58 | 6 | 199 | |
| | 0.00 | 0.37 | 1.42 | 0.77 | 0.08 | 2.64 | |
| | 0.00 | 14.07 | 53.77 | 29.15 | 3.02 | | |
| | 0.00 | 1.20 | 3.39 | 12.03 | 0.40 | | |
| TOTAL | 72 | 2327 | 3153 | 482 | 1509 | 7543 | |
| | 0.95 | 30.85 | 41.80 | 6.39 | 20.01 | 100.00 | |

Table C-2. (Continued)

DEC_FY=82

| SRB LEVEL | | REEN LENGTH | | | | | |
|--|--|-------------|-------|-------|-------|-------|--------|
| FREQUENCY PERCENT ROW PCT COL PCT | | 2 | 3 | 4 | 5 | 6 | TOTAL |
| 0 | | 48 | 1166 | 943 | 65 | 266 | 2488 |
| | | 0.68 | 16.41 | 13.27 | 0.91 | 3.74 | 35.01 |
| | | 1.93 | 46.86 | 37.90 | 2.61 | 10.69 | |
| | | 63.16 | 52.15 | 30.16 | 17.02 | 20.70 | |
| 1 | | 12 | 663 | 1021 | 75 | 255 | 2026 |
| | | 0.17 | 9.33 | 14.37 | 1.06 | 3.59 | 28.51 |
| | | 0.59 | 32.72 | 50.39 | 3.70 | 12.59 | |
| | | 15.79 | 29.65 | 32.65 | 19.63 | 19.84 | |
| 2 | | 9 | 251 | 412 | 40 | 244 | 956 |
| | | 0.13 | 3.53 | 5.80 | 0.56 | 3.43 | 13.45 |
| | | 0.94 | 26.26 | 43.10 | 4.18 | 25.52 | |
| | | 11.84 | 11.23 | 13.18 | 10.47 | 18.99 | |
| 3 | | 7 | 94 | 348 | 76 | 469 | 994 |
| | | 0.10 | 1.32 | 4.90 | 1.07 | 6.60 | 13.99 |
| | | 0.70 | 9.46 | 35.01 | 7.65 | 47.18 | |
| | | 9.21 | 4.20 | 11.13 | 19.90 | 36.50 | |
| 4 | | 0 | 8 | 49 | 31 | 37 | 125 |
| | | 0.00 | 0.11 | 0.69 | 0.44 | 0.52 | 1.76 |
| | | 0.00 | 6.40 | 39.20 | 24.80 | 29.60 | |
| | | 0.00 | 0.36 | 1.57 | 8.12 | 2.88 | |
| 5 | | 0 | 5 | 30 | 22 | 5 | 62 |
| | | 0.00 | 0.07 | 0.42 | 0.31 | 0.07 | 0.87 |
| | | 0.00 | 8.06 | 48.39 | 35.48 | 8.06 | |
| | | 0.00 | 0.22 | 0.96 | 5.76 | 0.39 | |
| 6 | | 0 | 49 | 324 | 73 | 9 | 455 |
| | | 0.00 | 0.69 | 4.56 | 1.03 | 0.13 | 6.40 |
| | | 0.00 | 10.77 | 71.21 | 16.04 | 1.98 | |
| | | 0.00 | 2.19 | 10.36 | 19.11 | 0.70 | |
| TOTAL | | 76 | 2236 | 3127 | 382 | 1285 | 7106 |
| | | 1.07 | 31.47 | 44.01 | 5.38 | 18.08 | 100.00 |

Table C-2. (Continued)

DEC_FY=83

SRB REEN LENGTH
LEVEL

| FREQUENCY PERCENT ROW PCT COL PCT | 2 | 3 | 4 | 5 | 6 | TOTAL |
|--|------------------------------|---------------------------------|---------------------------------|-------------------------------|-------------------------------|----------------|
| 0 | 200 2.66 5.11 87.72 | 1530 20.33 39.10 75.18 | 1825 24.26 46.64 47.91 | 79 1.05 2.02 16.95 | 279 3.71 7.13 28.30 | 3913 52.01 |
| 1 | 11 0.15 1.20 4.82 | 201 2.67 21.85 9.88 | 521 6.92 56.63 13.68 | 42 0.56 4.57 9.01 | 145 1.93 15.76 14.71 | 920 12.23 |
| 2 | 9 0.12 1.28 3.95 | 94 1.25 13.33 4.62 | 383 5.09 54.33 10.06 | 54 0.72 7.66 11.59 | 165 2.19 23.40 16.73 | 705 9.37 |
| 3 | 7 0.09 0.74 3.07 | 102 1.36 10.73 5.01 | 386 5.13 40.59 10.13 | 119 1.58 12.51 25.54 | 337 4.48 35.44 34.18 | 951 12.64 |
| 4 | 0 0.00 0.00 0.00 | 15 0.20 6.94 0.74 | 95 1.26 43.98 2.49 | 68 0.90 31.48 14.59 | 38 0.51 17.59 3.85 | 216 2.87 |
| 5 | 1 0.01 0.33 0.44 | 24 0.32 7.89 1.18 | 212 2.82 69.74 5.57 | 60 0.80 19.74 12.88 | 7 0.09 2.30 0.71 | 304 4.04 |
| 6 | 0 0.00 0.00 0.00 | 69 0.92 13.40 3.39 | 387 5.14 75.15 10.16 | 44 0.58 8.54 9.44 | 15 0.20 2.91 1.52 | 515 6.84 |
| TOTAL | 228 3.03 | 2035 27.05 | 3809 50.62 | 466 6.19 | 986 13.10 | 7524 100.00 |

Table C-2. (Continued)

DEC_FY=84

SRB
LEVEL REEN LENGTH

| FREQUENCY PERCENT ROW PCT COL PCT | | | | | | TOTAL |
|--|------------------------------|---------------------------------|---------------------------------|-------------------------------|-------------------------------|----------------|
| | 2 | 3 | 4 | 5 | 6 | |
| 0 | 193 2.03 4.86 78.46 | 1386 14.60 34.91 94.61 | 2191 23.08 55.19 38.99 | 55 0.58 1.39 5.99 | 145 1.53 3.65 11.66 | 3970 41.82 |
| 1 | 18 0.19 1.99 7.32 | 29 0.31 3.20 1.98 | 682 7.18 75.28 12.14 | 47 0.50 5.19 5.12 | 130 1.37 14.35 10.45 | 906 9.54 |
| 2 | 18 0.19 1.14 7.32 | 33 0.35 2.08 2.25 | 1006 10.60 63.51 17.90 | 106 1.12 6.69 11.55 | 421 4.43 26.58 33.84 | 1584 16.69 |
| 3 | 11 0.12 0.90 4.47 | 15 0.16 1.23 1.02 | 690 7.27 56.74 12.28 | 149 1.57 12.25 16.23 | 351 3.70 28.87 28.22 | 1216 12.81 |
| 4 | 4 0.04 0.47 1.63 | 0 0.00 0.00 0.00 | 422 4.45 49.18 7.51 | 267 2.81 31.12 29.08 | 165 1.74 19.23 13.26 | 858 9.04 |
| 5 | 2 0.02 0.21 0.81 | 2 0.02 0.21 0.14 | 629 6.63 65.59 11.19 | 294 3.10 30.66 32.03 | 32 0.34 3.34 2.57 | 959 10.10 |
| 6 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 |
| TOTAL | 246 2.59 | 1465 15.43 | 5620 59.20 | 918 9.67 | 1244 13.10 | 9493 100.00 |

Table C-2. (Continued)

DEC_FY=85

SRB
LEVEL REEN LENGTH

| FREQUENCY PERCENT ROW PCT COL PCT | 2 | 3 | 4 | 5 | 6 | TOTAL |
|--|-----------------------------|-------------------------------|---------------------------------|-------------------------------|---------------------------------|----------------|
| 0 | 53 0.65 3.97 51.46 | 576 7.01 43.18 72.27 | 635 7.73 47.60 16.06 | 20 0.24 1.50 1.86 | 50 0.61 3.75 2.18 | 1334 16.23 |
| 1 | 12 0.15 1.47 11.65 | 63 0.77 7.72 7.90 | 555 6.75 68.01 14.04 | 59 0.72 7.23 5.49 | 127 1.55 15.56 5.55 | 816 9.93 |
| 2 | 29 0.35 0.88 28.16 | 142 1.73 4.31 17.82 | 1673 20.36 50.77 42.31 | 301 3.66 9.14 28.03 | 1150 14.00 34.90 50.24 | 3295 40.10 |
| 3 | 7 0.09 0.65 6.80 | 12 0.15 1.12 1.51 | 427 5.20 39.87 10.80 | 151 1.84 14.10 14.06 | 474 5.77 44.26 20.71 | 1071 13.03 |
| 4 | 2 0.02 0.19 1.94 | 2 0.02 0.19 0.25 | 344 4.19 32.61 8.70 | 293 3.57 27.77 27.28 | 414 5.04 39.24 18.09 | 1055 12.84 |
| 5 | 0 0.00 0.00 0.00 | 2 0.02 0.31 0.25 | 320 3.89 49.54 8.09 | 250 3.04 38.70 23.28 | 74 0.90 11.46 3.23 | 646 7.86 |
| 6 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 |
| TOTAL | 103 1.25 | 797 9.70 | 3954 48.12 | 1074 13.07 | 2289 27.86 | 8217 100.00 |

Table C-2. (Continued)

DEC_FY=86

SRB REEN LENGTH
LEVEL

| FREQUENCY PERCENT ROW PCT COL PCT | 2 | 3 | 4 | 5 | 6 | TOTAL |
|--|------------------------------|---------------------------------|---------------------------------|-------------------------------|--------------------------------|----------------|
| 0 | 179 1.93 6.27 83.26 | 1083 11.65 37.92 91.94 | 1142 12.29 39.99 26.23 | 97 1.04 3.40 11.98 | 355 3.82 12.43 12.98 | 2856 30.73 |
| 1 | 5 0.05 1.07 2.33 | 24 0.26 5.15 2.04 | 314 3.38 67.38 7.21 | 34 0.37 7.30 4.20 | 89 0.96 19.10 3.25 | 466 5.01 |
| 2 | 17 0.18 0.60 7.91 | 57 0.61 2.02 4.84 | 1505 16.19 53.46 34.57 | 300 3.23 10.66 37.04 | 936 10.07 33.25 34.21 | 2815 30.29 |
| 3 | 13 0.14 0.60 6.05 | 13 0.14 0.60 1.10 | 1024 11.02 47.17 23.52 | 238 2.56 10.96 29.38 | 883 9.50 40.67 32.27 | 2171 23.36 |
| 4 | 1 0.01 0.13 0.47 | 1 0.01 0.13 0.08 | 302 3.25 40.59 6.94 | 89 0.96 11.96 10.99 | 351 3.78 47.18 12.83 | 744 8.01 |
| 5 | 0 0.00 0.00 0.00 | 0 0.00 0.00 0.00 | 67 0.72 27.80 1.54 | 52 0.56 21.58 6.42 | 122 1.31 50.62 4.46 | 241 2.59 |
| 6 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 |
| TOTAL | 215 2.31 | 1178 12.68 | 4354 46.85 | 810 8.72 | 2736 29.44 | 9293 100.00 |

Table C-2. (Continued)

DEC_FY=87

SRB
LEVEL REEN LENGTH

| FREQUENCY PERCENT ROW PCT COL PCT | 2 | 3 | 4 | 5 | 6 | TOTAL |
|--|------------------------------|-------------------------------|---------------------------------|-------------------------------|-------------------------------|----------------|
| 0 | 176 2.32 5.65 78.92 | 569 7.52 18.26 91.04 | 1468 19.39 47.11 38.02 | 163 2.15 5.23 27.53 | 740 9.77 23.75 32.60 | 3116 41.16 |
| 1 | 13 0.17 3.59 5.83 | 17 0.22 4.70 2.72 | 212 2.80 58.56 5.49 | 26 0.34 7.18 4.39 | 94 1.24 25.97 4.14 | 362 4.78 |
| 2 | 28 0.37 1.13 12.56 | 29 0.38 1.17 4.64 | 1529 20.20 61.85 39.60 | 226 2.99 9.14 38.18 | 660 8.72 26.70 29.07 | 2472 32.65 |
| 3 | 4 0.05 2.03 1.79 | 2 0.03 1.02 0.32 | 89 1.18 45.18 2.31 | 25 0.33 12.69 4.22 | 77 1.02 39.09 3.39 | 197 2.60 |
| 4 | 2 0.03 0.14 0.90 | 8 0.11 0.56 1.28 | 563 7.44 39.54 14.58 | 152 2.01 10.67 25.68 | 699 9.23 49.09 30.79 | 1424 18.81 |
| 5 | 0 0.00 0.00 0.00 | 0 0.00 0.00 0.00 | 0 0.00 0.00 0.00 | 0 0.00 0.00 0.00 | 0 0.00 0.00 0.00 | 0 0.00 |
| 6 | 0 0.00 0.00 0.00 | 0 0.00 0.00 0.00 | 0 0.00 0.00 0.00 | 0 0.00 0.00 0.00 | 0 0.00 0.00 0.00 | 0 0.00 |
| TOTAL | 223 2.95 | 625 8.26 | 3861 51.00 | 592 7.82 | 2270 29.98 | 7571 100.00 |

Table C-2. (Continued)

DEC_FY=88

SRB
LEVEL REEN LENGTH

| FREQUENCY PERCENT ROW PCT COL PCT | | | | | | TOTAL |
|--|-------------------------------|--------------------------------|---------------------------------|-----------------------------|--------------------------------|----------------|
| | 2 | 3 | 4 | 5 | 6 | |
| 0 | 165 2.94 10.99 63.95 | 598 10.66 39.81 89.12 | 654 11.66 43.54 20.30 | 19 0.34 1.26 7.79 | 66 1.18 4.39 5.44 | 1502 26.78 |
| 1 | 7 0.12 2.25 2.71 | 20 0.36 6.43 2.98 | 237 4.23 76.21 7.36 | 11 0.20 3.54 4.51 | 36 0.64 11.58 2.97 | 311 5.55 |
| 2 | 42 0.75 2.89 16.28 | 35 0.62 2.41 5.22 | 1001 17.85 68.84 31.07 | 67 1.19 4.61 27.46 | 309 5.51 21.25 25.47 | 1454 25.93 |
| 3 | 15 0.27 3.03 5.81 | 5 0.09 1.01 0.75 | 312 5.56 63.03 9.68 | 35 0.62 7.07 14.34 | 128 2.28 25.86 10.55 | 495 8.83 |
| 4 | 27 0.48 1.63 10.47 | 13 0.23 0.78 1.94 | 928 16.55 55.87 28.80 | 97 1.73 5.84 39.75 | 596 10.63 35.88 49.13 | 1661 29.62 |
| 5 | 2 0.04 1.08 0.78 | 0 0.00 0.00 0.00 | 90 1.60 48.65 2.79 | 15 0.27 8.11 6.15 | 78 1.39 42.16 6.43 | 185 3.30 |
| 6 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 |
| TOTAL | 258 4.60 | 671 11.97 | 3222 57.45 | 244 4.35 | 1213 21.63 | 5608 100.00 |

Table C-2. (Continued)

DEC_FY=89

| SRB LEVEL | REEN LENGTH | | | | | |
|--|------------------------------|---------------------------------|---------------------------------|-----------------------------|-------------------------------|----------------|
| FREQUENCY PERCENT ROW PCT COL PCT | 2 | 3 | 4 | 5 | 6 | TOTAL |
| 0 | 199 4.07 7.29 81.89 | 1091 22.29 39.96 96.12 | 1372 28.03 50.26 44.65 | 5 0.10 0.18 6.41 | 63 1.29 2.31 17.21 | 2730 55.77 |
| 1 | 17 0.35 3.31 7.00 | 31 0.63 6.04 2.73 | 436 8.91 84.99 14.19 | 2 0.04 0.39 2.56 | 27 0.55 5.26 7.38 | 513 10.48 |
| 2 | 12 0.25 3.14 4.94 | 5 0.10 1.31 0.44 | 298 6.09 78.01 9.70 | 17 0.35 4.45 21.79 | 50 1.02 13.09 13.66 | 382 7.80 |
| 3 | 9 0.18 2.21 3.70 | 4 0.08 0.98 0.35 | 339 6.93 83.09 11.03 | 17 0.35 4.17 21.79 | 39 0.80 9.56 10.66 | 408 8.34 |
| 4 | 6 0.12 0.71 2.47 | 4 0.08 0.48 0.35 | 618 12.63 73.40 20.11 | 37 0.76 4.39 47.44 | 177 3.62 21.02 48.36 | 842 17.20 |
| 5 | 0 0.00 0.00 0.00 | 0 0.00 0.00 0.00 | 10 0.20 50.00 0.33 | 0 0.00 0.00 0.00 | 10 0.20 50.00 2.73 | 20 0.41 |
| 6 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 |
| TOTAL | 243 4.96 | 1135 23.19 | 3073 62.78 | 78 1.59 | 366 7.48 | 4895 100.00 |

Table C-2. (Continued)

DEC_FY=90 (NOTE: INCLUDES ONLY DECISIONS THROUGH JUNE 1990)

SRB REEN LENGTH
LEVEL

| FREQUENCY PERCENT ROW PCT COL PCT | 2 | 3 | 4 | 5 | 6 | TOTAL |
|--|-----------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|----------------|
| 0 | 93 2.62 3.67 93.00 | 1322 37.31 52.13 97.71 | 1086 30.65 42.82 59.80 | 6 0.17 0.24 10.71 | 29 0.82 1.14 13.30 | 2536 71.58 |
| 1 | 2 0.06 1.45 2.00 | 16 0.45 11.59 1.18 | 116 3.27 84.06 6.39 | 3 0.08 2.17 5.36 | 1 0.03 0.72 0.46 | 138 3.90 |
| 2 | 0 0.00 0.00 0.00 | 5 0.14 5.26 0.37 | 77 2.17 81.05 4.24 | 1 0.03 1.05 1.79 | 12 0.34 12.63 5.50 | 95 2.68 |
| 3 | 1 0.03 0.65 1.00 | 3 0.08 1.96 0.22 | 119 3.36 77.78 6.55 | 10 0.28 6.54 17.86 | 20 0.56 13.07 9.17 | 153 4.32 |
| 4 | 4 0.11 0.91 4.00 | 3 0.08 0.68 0.22 | 325 9.17 74.20 17.90 | 16 0.45 3.65 28.57 | 90 2.54 20.55 41.28 | 438 12.36 |
| 5 | 0 0.00 0.00 0.00 | 4 0.11 2.19 0.30 | 93 2.62 50.82 5.12 | 20 0.56 10.93 35.71 | 66 1.86 36.07 30.28 | 183 5.17 |
| 6 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 0.00 | 0 0.00 |
| TOTAL | 100 2.82 | 1353 38.19 | 1816 51.26 | 56 1.58 | 218 6.15 | 3543 100.00 |

APPENDIX D

THE LOGIT EQUATION

APPENDIX D

THE LOGIT EQUATION

The following is a more complete discussion of the logit equation used to estimate the probability of reenlistment in the Marine Corps.

$$P(\text{reenlist}) = (1 + e^{-B'X})^{-1} ,$$

where P is the probability, B' is a row vector of coefficients, and X is a column vector of variables. Figure 7 in the main text shows an example of a logit curve.

The partial derivative of the logit function at the mean of the function is as follows:

$$\frac{\partial P}{\partial x_i} = (\bar{P})(1 - \bar{P})B_i ,$$

where i is the i th variable and \bar{P} is the sample mean or proportion. The following equations illustrate this result:

$$P = (1 + e^{-B'X})^{-1} ;$$

$$1 - P = (e^{-B'X})(1 + e^{-B'X})^{-1} ;$$

$$\frac{\partial P}{\partial x_i} = - (1 + e^{-B'X})^{-2} (-B_i e^{-B'X}) ,$$

$$= (1 + e^{-B'X})^{-1} \frac{(B_i)(e^{-B'X})}{(1 + e^{-B'X})} ,$$

$$= P(B_i)(1 - P) ,$$

$$= B_i(P)(1 - P) .$$

APPENDIX E

**LOGIT REENLISTMENT EQUATION ESTIMATES WITH SEPARATE
INDICATOR VARIABLES FOR EACH SRB LEVEL**

Table E-1. Logit coefficients and derivatives for reenlistment decisions, FY 1980 through FY 1990

| | Mean value | Specification 1 | | Specification 2 | |
|--------------------------|---------------|--------------------|------------|--------------------|------------|
| | | Coefficient | Derivative | Coefficient | Derivative |
| SRB1 | .098 | .384** (7.32) | .084 | .349** (6.81) | .077 |
| SRB2 | .166 | .701** (15.74) | .154 | .729** (17.20) | .160 |
| SRB3 | .080 | .927** (16.59) | .203 | .970** (17.81) | .213 |
| SRB4 | .069 | 1.253** (20.36) | .275 | 1.193** (19.82) | .261 |
| SRB5 | .023 | 1.345** (13.84) | .295 | 1.378** (14.39) | .302 |
| SRB6 | .008 | 1.718** (11.18) | .376 | 1.601** (10.48) | .351 |
| SRB_AFQT12 | .110 | .157* (2.22) | .034 | .134* (1.91) | .029 |
| AFQT12 | .227 | -.207** (-3.74) | -.045 | -.177** (-3.20) | -.039 |
| Cpl | .588 | .649** (16.28) | .142 | .645** (16.32) | .141 |
| Sgt | .179 | .975** (18.75) | .214 | .984** (19.14) | .216 |
| SSgt | .003 | 2.142** (7.71) | .469 | 2.152** (7.83) | .472 |
| Married or dependents | .380 | .827** (28.32) | .181 | .830** (28.61) | .182 |
| Pay index | 1.167 | No | -- | 2.563** (7.87) | .562 |
| Civilian unemployment | .116 | No | -- | 2.795** (4.40) | .612 |

Table E-1. (Continued)

| | Mean value | Specification 1 | | Specification 2 | |
|-------------------------------|---------------|---------------------|------------|---------------------|------------|
| | | Coefficient | Derivative | Coefficient | Derivative |
| Length of first contract | 3.807 | .100** (2.92) | .022 | .078* (2.34) | .017 |
| Prior extension | .110 | .439** (9.77) | .096 | .454** (10.18) | .100 |
| Male | .952 | -.228** (-3.50) | -.050 | -.235** (-3.62) | -.052 |
| HSDG | .844 | -.109** (-2.71) | -.024 | -.114** (-2.85) | -.025 |
| Black | .180 | 1.074** (28.86) | .235 | 1.069** (28.95) | .234 |
| Hispanic | .057 | .142* (2.26) | .031 | .122* (1.97) | .027 |
| Infantry | .277 | -.446** (-11.08) | -.098 | -.421** (-10.55) | -.092 |
| Air mechanical, fixed-wing | .057 | -.238** (-3.67) | -.052 | -.208** (-3.21) | -.046 |
| Air mechanical, helicopter | .031 | -.301** (-3.58) | -.066 | -.260** (-3.11) | -.057 |
| Air, technical | .086 | -.493** (-7.93) | -.108 | -.462** (-7.49) | -.101 |
| Air, other | .039 | -.051 (-.67) | -.011 | -.027 (-.351) | -.006 |
| Other, technical | .097 | -0.086 (-1.57) | -.019 | -.082 (-1.50) | -.018 |
| Administrative | .131 | .432** (9.16) | .095 | .448** (9.55) | .098 |
| FY 1980 | .094 | -.706** (-7.49) | -.155 | No | -- |
| FY 1981 | .080 | -.268** (-2.90) | -.059 | No | -- |

Table E-1. (Continued)

| | Mean value | Specification 1 | | Specification 2 | |
|---------------------------|---------------|----------------------|------------|----------------------|------------|
| | | Coefficient | Derivative | Coefficient | Derivative |
| FY 1982 | .081 | -.299** (-3.43) | -.066 | No | -- |
| FY 1983 | .084 | .047 (.600) | .010 | No | -- |
| FY 1984 | .090 | .277** (3.67) | .061 | No | -- |
| FY 1985 | .095 | -.043 (-.56) | -.009 | No | -- |
| FY 1986 | .106 | .323** (4.37) | .071 | No | -- |
| FY 1987 | .100 | .226** (3.05) | .050 | No | -- |
| FY 1988 | .105 | -.425** (-5.61) | -.093 | No | -- |
| FY 1989 | .088 | -.226** (-2.94) | -.050 | No | -- |
| AFQT missing | .290 | .272** (4.87) | .060 | .169** (3.27) | .037 |
| Constant | 1.00 | -2.244** (-13.32) | -- | -5.548** (-13.45) | -- |
| Chi-square | | 4,740.0 | | 4,494.0 | |
| Number of observations | | 26,840 | | 26,840 | |

NOTES: (1) The number in parentheses beneath each coefficient is an asymptotic t-statistic.
 (2) ** Coefficient is statistically significant at the 1-percent level (two-tailed test).
 (3) * Coefficient is statistically significant at the 5-percent level (two-tailed test).

APPENDIX F

LOGIT REENLISTMENT EQUATIONS FOR INDIVIDUAL MOSs

APPENDIX F

LOGIT REENLISTMENT EQUATIONS FOR INDIVIDUAL MOSs

This appendix provides estimates of the derivatives from reenlistment equations estimated separately for each of the following PMOSs:

- 0231 Intelligence Specialist (table F-1)
- 0311 Rifleman (table F-2)
- 0431 Logistic/Embarkation Specialist (table F-3)
- 1371 Combat Engineer (table F-4)
- 2531 Field Radio Operator (table F-5)
- 3043 Supply Administration and Operation Clerk (table F-6)
- 3531 Motor Vehicle Operator (table F-7)
- 5811 Military Police (table F-8)

Table F-1. MOS 0231: Derivatives at the average reenlistment rate,
453 decisions (derived from logit equation estimates)

| Variable | Specification | | | | | |
|-----------------------------|------------------|-----------------|------------------|------------------|------------------|------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Corporal | .020 (.16) | -.007 (-.06) | .032 (.27) | .007 (.06) | .041 (.34) | .019 (.16) |
| Sgt/Staff Sgt | .088 (.71) | .070 (.56) | .107 (.90) | .089 (.76) | .126 (1.04) | .113 (.93) |
| AFQT12 | -.300 (-2.51) | -.068 (-.93) | -.281 (-2.44) | -.076 (-1.05) | -.266 (-2.23) | -.078 (-1.07) |
| SRB_AFT12 | .323 (2.51) | No | .285 (2.32) | No | .263 (2.02) | No |
| HSDG | .010 (.13) | .035 (.44) | .004 (.05) | .023 (.30) | .009 (.12) | .030 (.39) |
| Black | .233 (2.20) | .239 (2.27) | .229 (2.25) | .234 (2.30) | .228 (2.22) | .232 (2.26) |
| Hispanic | .307 (1.10) | .335 (1.18) | .348 (1.24) | .383 (1.36) | .359 (1.28) | .398 (1.40) |
| Married or dependents | .095 (1.73) | .087 (1.60) | .109 (2.05) | .100 (1.90) | .103 (1.92) | .094 (1.78) |
| Length of first contract | .035 (1.00) | .031 (.88) | .033 (.97) | .027 (.81) | .033 (.97) | .028 (.82) |
| Prior extension | .086 (1.04) | .093 (1.15) | .034 (.43) | .044 (.56) | .034 (.42) | .034 (.43) |
| SRB level | .028 (.85) | .072 (2.74) | .048 (2.29) | .082 (5.28) | No | No |
| SRB level 1 | No | No | No | No | .179 (.95) | .301 (1.68) |
| SRB level 3 | No | No | No | No | .218 (2.09) | .347 (4.06) |
| SRB level 4 | No | No | No | No | .169 (1.80) | .304 (4.44) |
| SRB level 5 | No | No | No | No | .330 (2.71) | .466 (4.55) |

Table F-1. (Continued)

| Variable | Specification | | | | | |
|---------------------------|---------------|-------|-----------------|-----------------|-----------------|-----------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Missing AFQT | Yes | Yes | Yes | Yes | Yes | Yes |
| Fiscal year variables | Yes | Yes | No | No | No | No |
| Unemployment rate | No | No | 5.80 (4.46) | 5.82 (4.41) | 5.796 (4.29) | 5.540 (4.13) |
| Pay index | No | No | 2.347 (3.46) | 2.409 (3.45) | 2.589 (3.48) | 2.738 (3.56) |
| Constant | Yes | Yes | Yes | Yes | Yes | Yes |
| Chi-square ^a | 112.8 | 106.3 | 98.3 | 92.7 | 101.5 | 97.3 |
| Average reenlistment rate | .536 | .536 | .536 | .536 | .536 | .536 |

NOTE: The 453 decisions represent all zone A reenlistments from FY 1980 through June 1990 for MOS 0231.

- a. The chi-square statistic is an overall statistic describing the fit of the equation. Technically, it is $(-2)[(\ln \text{likelihood of the logit with just a constant term}) - (\ln \text{likelihood of the full logit})]$. All chi-square values reported in this paper are statistically significant at very high levels.

Table F-2. MOS 0311: Derivatives at the average reenlistment rate, 3,437 decisions (derived from logit equation estimates)

| Variable | Specification | | | |
|--------------------------|------------------|------------------|------------------|------------------|
| | (1) | (2) | (3) | (4) |
| Corporal | .120 (6.78) | .126 (7.14) | .120 (6.80) | .127 (7.17) |
| Sgt/Staff Sgt | .217 (8.29) | .230 (8.95) | .215 (8.20) | .229 (8.90) |
| AFQT12 | -.011 (-.54) | -.009 (-.42) | -.013 (-.66) | -.011 (-.55) |
| HSDG | -.010 (-.53) | -.013 (-.71) | -.011 (-.59) | -.013 (-.71) |
| Black | .151 (9.27) | .155 (9.52) | .152 (9.35) | .156 (9.58) |
| Hispanic | -.047 (-1.45) | -.047 (-1.44) | -.046 (-1.42) | -.045 (-1.39) |
| Married or dependents | .118 (8.42) | .118 (8.45) | .117 (8.35) | .118 (8.41) |
| Length of first contract | .028 (1.76) | .028 (1.85) | .033 (2.09) | .031 (2.00) |
| Prior extension | .106 (4.76) | .106 (4.78) | .102 (4.59) | .104 (4.72) |
| SRB level | .064 (6.56) | .063 (9.05) | No | No |
| SRB level one | No | No | .091 (3.30) | .048 (2.09) |
| SRB level two | No | No | .154 (7.17) | .142 (8.31) |
| SRB level three | No | No | .117 (3.07) | .161 (6.19) |
| Missing AFQT | Yes | Yes | Yes | Yes |

Table F-2. (Continued)

| Variable | Specification | | | |
|---------------------------|---------------|----------------|-------|----------------|
| | (1) | (2) | (3) | (4) |
| Fiscal year variables | Yes | No | Yes | No |
| Unemployment rates | No | .691 (2.01) | No | .748 (2.14) |
| Pay index | No | .108 (.57) | No | .087 (.45) |
| Constant | Yes | Yes | Yes | Yes |
| Chi-square ^a | 455.8 | 428.6 | 465.6 | 432.0 |
| Average reenlistment rate | .224 | .224 | .224 | .224 |

a. The chi-square statistic is an overall statistic describing the fit of the equation. Technically, it is $(-2)[(\ln \text{likelihood of the logit with just a constant term}) - (\ln \text{likelihood of the full logit})]$. All chi-square values reported in this paper are statistically significant at very high levels.

Table F-3. MOS 0431: Derivatives at the average reenlistment rate, 930 decisions (derived from logit equation estimates)

| Variable | Specification | | | |
|--------------------------|-----------------|-----------------|------------------|-----------------|
| | (1) | (2) | (3) | (4) |
| Corporal | .048 (.88) | .010 (.20) | .045 (.82) | .017 (.32) |
| Sgt/Staff Sgt | .169 (2.50) | .105 (1.64) | .163 (2.40) | .115 (1.77) |
| AFQT12 | .088 (1.83) | .074 (1.63) | .084 (1.73) | .072 (1.59) |
| HSDG | -.044 (-.90) | -.039 (-.82) | -.050 (-1.03) | -.040 (-.83) |
| Black | .183 (3.97) | .183 (4.09) | .183 (3.97) | .186 (4.15) |
| Hispanic | -.009 (-.12) | -.028 (-.39) | -.021 (-.28) | -.031 (-.42) |
| Married or dependents | .182 (4.73) | .172 (4.62) | .180 (4.64) | .172 (4.59) |
| Length of first contract | .033 (.87) | .044 (1.20) | .034 (.88) | .035 (.96) |
| Prior extension | .127 (2.36) | .137 (2.62) | .241 (2.48) | .138 (2.64) |
| SRB level | .151 (6.94) | .114 (7.17) | No | No |
| SRB level one | No | No | -.002 (-.02) | .023 (.29) |
| SRB level two | No | No | .272 (5.55) | .248 (6.34) |
| SRB level four | No | No | .891 (5.43) | .409 (4.79) |
| Missing AFQT | Yes | Yes | Yes | Yes |
| Fiscal year variables | Yes | No | Yes | No |

Table F-3. (Continued)

| Variable | Specification | | | |
|---------------------------|---------------|-----------------|-------|-----------------|
| | (1) | (2) | (3) | (4) |
| Unemployment rate | No | 3.391 (4.01) | No | 3.276 (3.82) |
| Pay index | No | 1.341 (3.24) | No | 1.430 (3.41) |
| Constant | Yes | Yes | Yes | Yes |
| Chi-square ^a | 192.1 | 157.1 | 199.5 | 159.2 |
| Average reenlistment rate | .442 | .442 | .442 | .442 |

a. The chi-square statistic is an overall statistic describing the fit of the equation. Technically, it is $(-2)[(\ln \text{likelihood of the logit with just a constant term}) - (\ln \text{likelihood of the full logit})]$. All chi-square values reported in this paper are statistically significant at very high levels.

Table F-4. MOS 1371: Derivatives at the average reenlistment rate, 524 decisions (derived from logit equation estimates)

| Variable | Specification | | | |
|--------------------------|-----------------|-----------------|-----------------|-----------------|
| | (1) | (2) | (3) | (4) |
| Corporal | .095 (1.82) | .099 (1.96) | .099 (1.89) | .104 (2.05) |
| Sgt/Staff Sgt | .203 (2.72) | .215 (2.93) | .207 (2.77) | .217 (2.95) |
| AFQT12 | .032 (.46) | .034 (.50) | .029 (.40) | .034 (.49) |
| HSDG | -.012 (-.20) | -.011 (-.20) | -.011 (-.19) | -.010 (-.18) |
| Black | .264 (4.35) | .286 (4.84) | .257 (4.23) | .275 (4.60) |
| Hispanic | .177 (1.94) | .182 (2.06) | .169 (1.86) | .187 (2.09) |
| Married or dependents | .182 (3.89) | .169 (3.77) | .182 (3.89) | .167 (3.71) |
| Length of first contract | .238 (4.46) | .232 (4.50) | .241 (4.49) | .234 (4.51) |
| Prior extension | -.037 (-.50) | -.052 (-.72) | -.034 (-.46) | -.053 (-.73) |
| SRB level | .118 (3.29) | .083 (3.86) | No | No |
| SRB level one | No | No | .0004 (.00) | .175 (2.30) |
| SRB level two | No | No | .273 (2.92) | .256 (3.43) |
| SRB level three | No | No | .344 (3.14) | .257 (3.69) |
| Missing AFQT | Yes | Yes | Yes | Yes |

Table F-4. (Continued)

| Variable | Specification | | | |
|---------------------------|---------------|-----------------|-------|----------------|
| | (1) | (2) | (3) | (4) |
| Fiscal year variables | Yes | No | Yes | No |
| Unemployment rates | No | -.369 (-.35) | No | .125 (.11) |
| Pay index | No | .855 (1.65) | No | .675 (1.27) |
| Constant | Yes | Yes | Yes | Yes |
| Chi-square ^a | 125.5 | 113.3 | 126.7 | 116.1 |
| Average reenlistment rate | .261 | .261 | .261 | .261 |

a. The chi-square statistic is an overall statistic describing the fit of the equation. Technically, it is $(-2)[(\ln \text{likelihood of the logit with just a constant term}) - (\ln \text{likelihood of the full logit})]$. All chi-square values reported in this paper are statistically significant at very high levels. There are no women Marines in this MOS.

Table F-5. MOS 2531: Derivatives at the average reenlistment rate, 1,268 decisions (derived from logit equation estimates)

| Variable | Specification | | | |
|--------------------------|------------------|------------------|------------------|------------------|
| | (1) | (2) | (3) | (4) |
| Corporal | .113 (3.50) | .111 (3.55) | .115 (3.55) | .110 (3.53) |
| Sgt/Staff Sgt | .222 (4.05) | .225 (4.20) | .223 (4.05) | .229 (4.24) |
| Male | .003 (.06) | .006 (.11) | .005 (.09) | .008 (.14) |
| AFQT12 | -.064 (-1.44) | -.058 (-1.33) | -.062 (-1.40) | -.054 (-1.24) |
| HSDG | .005 (.13) | .005 (.13) | .015 (.38) | .012 (.32) |
| Black | .184 (5.83) | .182 (5.88) | .187 (5.91) | .183 (.96) |
| Hispanic | .019 (.32) | .013 (.21) | .017 (.28) | .010 (.17) |
| Married or dependents | .146 (5.18) | .129 (4.59) | .149 (5.26) | .134 (4.75) |
| Length of first contract | .019 (.61) | .004 (.12) | .017 (.55) | .003 (.10) |
| Prior extension | .079 (1.76) | .079 (1.82) | .081 (1.80) | .082 (1.87) |
| SRB level | .172 (6.73) | .142 (8.87) | No | No |
| SRB level one | No | No | .370 (3.90) | .299 (4.34) |
| SRB level two | No | No | .311 (3.90) | .271 (8.35) |
| Missing AFQT | Yes | Yes | Yes | Yes |
| Fiscal year variables | Yes | No | Yes | No |

Table F-5. (Continued)

| Variable | Specification | | | |
|---------------------------|---------------|----------------|-------|----------------|
| | (1) | (2) | (3) | (4) |
| Unemployment rate | No | .893 (1.44) | No | .594 (.90) |
| Pay index | No | .706 (2.27) | No | .711 (2.26) |
| Constant | Yes | Yes | Yes | Yes |
| Chi-square ^a | 224.4 | 203.2 | 229.4 | 208.6 |
| Average reenlistment rate | .256 | .256 | .256 | .256 |

a. The chi-square statistic is an overall statistic describing the fit of the equation. Technically, it is $(-2)[(\ln \text{likelihood of the logit with just a constant term}) - (\ln \text{likelihood of the full logit})]$. All chi-square values reported in this paper are statistically significant at very high levels.

Table F-6. MOS 3043: Derivatives at the average reenlistment rate, 566 decisions (derived from logit equation estimates)

| Variable | Specification | | | |
|--------------------------|------------------|------------------|------------------|------------------|
| | (1) | (2) | (3) | (4) |
| Corporal | .022 (.32) | .023 (.35) | .024 (.35) | .016 (.25) |
| Sgt/Staff Sgt | .294 (3.38) | .279 (3.35) | .293 (3.37) | .267 (3.20) |
| Male | -.175 (-2.46) | -.163 (-2.39) | -.177 (-2.50) | -.165 (-2.43) |
| AFQT12 | -.014 (-.22) | .018 (.30) | -.013 (-.20) | .006 (.10) |
| HSDG | .060 (.83) | .042 (.60) | .061 (.84) | .045 (.66) |
| Black | .274 (4.60) | .265 (4.66) | .271 (4.56) | .271 (4.75) |
| Hispanic | .069 (.69) | .029 (.30) | .069 (.69) | .031 (.33) |
| Married or dependents | .173 (3.53) | .172 (3.65) | .170 (3.43) | .167 (3.51) |
| Length of first contract | .171 (3.18) | .136 (2.65) | .169 (3.14) | .145 (2.81) |
| Prior extension | .051 (.62) | .076 (.98) | .054 (.66) | .078 (.99) |
| SRB level | .147 (5.25) | .087 (4.41) | No | No |
| SRB level one | No | No | .141 (1.48) | .036 (.49) |
| SRB level two | No | No | .295 (3.70) | .111 (1.81) |
| SRB level three or four | No | No | .481 (4.69) | .312 (4.42) |
| Missing AFQT | Yes | Yes | Yes | Yes |

Table F-6. (Continued)

| Variable | Specification | | | |
|---------------------------|---------------|-----------------|-------|-----------------|
| | (1) | (2) | (3) | (4) |
| Fiscal year variables | Yes | No | Yes | No |
| Unemployment rate | No | .831 (.89) | No | 1.083 (1.09) |
| Pay index | No | -.052 (-.10) | No | -.052 (-.10) |
| Constant | Yes | Yes | Yes | Yes |
| Chi-square ^a | 129.8 | 100.8 | 127.2 | 101.4 |
| Average reenlistment rate | .443 | .443 | .443 | .443 |

a. The chi-square statistic is an overall statistic describing the fit of the equation. Technically, it is $(-2)[(\ln \text{likelihood of the logit with just a constant term}) - (\ln \text{likelihood of the full logit})]$. All chi-square values reported in this paper are statistically significant at very high levels.

Table F-7. MOS 3531: Derivatives at the average reenlistment rate, 1,140 decisions (derived from logit equation estimates)

| Variable | Specification | |
|--------------------------|------------------|------------------|
| | (1) | (2) |
| Corporal | .123 (3.26) | .102 (3.01) |
| Sgt/Staff Sgt | .336 (5.05) | .304 (5.08) |
| Male | -.215 (-2.81) | -.207 (-3.05) |
| AFQT12 | -.080 (-1.31) | -.085 (-1.54) |
| HSDG | -.057 (-1.24) | -.049 (-1.19) |
| Black | .307 (8.16) | .270 (7.99) |
| Hispanic | .168 (2.67) | .147 (2.54) |
| Married or dependents | .192 (5.96) | .175 (6.01) |
| Length of first contract | -.016 (-.42) | -.013 (-.39) |
| Prior extension | .143 (2.89) | .135 (3.05) |
| SRB level ^a | .158 (4.35) | .136 (7.98) |
| Missing AFQT | Yes | Yes |
| Fiscal year variables | Yes | No |
| Unemployment rate | No | 1.054 (1.42) |
| Pay index | No | -.464 (-1.35) |

Table F-7. (Continued)

| Variable | Specification | |
|---------------------------|---------------|-------|
| | (1) | (2) |
| Constant | Yes | Yes |
| Chi-square | 272.6 | 249.7 |
| Average reenlistment rate | .309 | .309 |

a. MOS 3531 has only had a zero-level and a level-two SRB bonus in the 7910 through 9006 period. Thus, the SRB level variable assumes only one meaningful value, and the specifications with the individual levels cannot be estimated.

Table F-8. MOS 5811: Derivatives at the average reenlistment rate, 514 decisions (derived from logit equation estimates)

| Variable | Specification | | | |
|--------------------------|------------------|------------------|------------------|------------------|
| | (1) | (2) | (3) | (4) |
| Corporal | .147 (1.90) | .136 (2.17) | .151 (1.94) | .139 (2.20) |
| Sgt/Staff Sgt | .128 (1.43) | .116 (1.57) | .130 (1.45) | .114 (1.55) |
| Male | -.102 (-.91) | -.069 (-.73) | -.109 (-.97) | -.068 (-.73) |
| AFQT12 | -.117 (-1.67) | -.103 (-1.75) | -.123 (-1.74) | -.102 (-1.75) |
| HSDG | -.153 (-2.16) | -.142 (-2.41) | -.148 (-2.08) | -.136 (-2.32) |
| Black | .404 (5.51) | .335 (5.52) | .412 (5.56) | .336 (5.54) |
| Hispanic | .133 (1.30) | .116 (1.36) | .137 (1.34) | .123 (1.44) |
| Married or dependents | .114 (2.26) | .107 (2.51) | .114 (2.24) | .107 (2.52) |
| Length of first contract | -.066 (-.94) | -.093 (-1.56) | -.062 (-.88) | -.092 (-1.56) |
| Prior extension | .065 (.86) | .071 (1.13) | .074 (.97) | .078 (1.23) |
| SRB level | .259 (5.75) | .192 (8.46) | No | No |
| SRB level one | No | No | .444 (2.82) | .307 (2.79) |
| SRB level two | No | No | .543 (5.59) | .396 (7.38) |
| SRB level three | No | No | .674 (3.69) | .562 (6.92) |
| Missing AFQT | Yes | Yes | Yes | Yes |

Table F-8. (Continued)

| Variable | Specification | | | |
|---------------------------|---------------|-----------------|-------|-----------------|
| | (1) | (2) | (3) | (4) |
| Fiscal year variables | Yes | No | Yes | No |
| Unemployment rate | No | .415 (.32) | No | .296 (.22) |
| Pay index | No | 2.496 (4.42) | No | 2.452 (4.32) |
| Constant | Yes | Yes | Yes | Yes |
| Chi-square ^a | 168.7 | 160.3 | 170.7 | 161.6 |
| Average reenlistment rate | .302 | .302 | .302 | .302 |

a. The chi-square statistic is an overall statistic describing the fit of the equation. Technically, it is $(-2)[(\ln \text{likelihood of the logit with just a constant term}) - (\ln \text{likelihood of the full logit})]$. All chi-square values reported in this paper are statistically significant at very high levels.

APPENDIX G

ADDITIONAL INFORMATION ON IN-YEAR VERSUS EARLY REENLISTMENTS

Table G-1. Logit equation results for various reenlistment outcomes:
FY 1989 decisions

| Variable | Reenlistment outcome ^a | | | | | |
|-------------------------------|-----------------------------------|-------------------|--|-------|---|-------|
| | Probability of reenlisting | | If reenlisting, probability of reenlisting early | | Probability of in-year reenlistment (exclude early reenlistments) | |
| | Coeff. | Der. ^b | Coeff. | Der. | Coeff. | Der. |
| SRB_LEV | .167** (12.38) | .033 | .315** (12.13) | .061 | .078** (5.07) | .014 |
| AFQT12 | -.071 (-1.60) | -- | .298** (3.57) | .059 | -.142** (-2.82) | -.025 |
| HSDG | .016 (.25) | -- | .215 (1.69) | -- | -.029 (-.41) | -- |
| Corporal | .518** (10.67) | .103 | -.435** (-4.52) | -.085 | .627** (11.31) | .109 |
| Sgt./Staff Sgt. | 1.240** (15.24) | .248 | -.224 (-1.60) | -- | 1.273** (13.68) | .222 |
| Five-year obligors | 1.685 ** (4.79) | .336 | 1.926** (4.68) | .378 | 1.171* (2.51) | .204 |
| Six-year obligors | .505** (4.38) | .101 | 1.498** (8.67) | .294 | -.161 (-1.07) | -- |
| Married or dependents | .733** (20.06) | .146 | .044 (.62) | -- | .703** (17.17) | .122 |
| Male | .092 (1.09) | -- | .133 (.82) | -- | .080 (.87) | -- |
| Black | .916** (19.88) | .183 | -.310** (-3.57) | -.061 | .978** (19.53) | .170 |
| Hispanic | .400** (5.04) | .080 | -.184 (-1.17) | -- | .457** (5.25) | .080 |
| Infantry | -.330** (-6.60) | -.066 | .370** (3.70) | .073 | -.434** (-7.64) | -.076 |
| Air mechanical, fixed-wing | .084 (1.01) | -- | -.442** (-2.86) | -.087 | .174 (1.87) | -- |
| Air mechanical, helicopter | -.252* (-2.29) | -.050 | -.820** (-3.46) | -.161 | -.092 (-.78) | -- |
| Air, technical | -.137 (-1.83) | -- | -.547** (-3.90) | -.107 | -.035 (-.41) | -- |

Table G-1. (Continued)

| Variable | Reenlistment outcome ^a | | | | | |
|-------------------------|-----------------------------------|-------------------|--|------|---|------|
| | Probability of reenlisting | | If reenlisting, probability of reenlisting early | | Probability of in-year reenlistment (exclude early reenlistments) | |
| | Coeff. | Der. ^b | Coeff. | Der. | Coeff. | Der. |
| Other, air | -.015 (-.16) | -- | -.122 (-.71) | -- | .028 (.25) | -- |
| Other, technical | -.174* (-2.41) | -.035 | -.173 (-1.08) | -- | -.149 (-1.90) | -- |
| Administration | .591** (10.02) | .118 | -.021 (-.19) | -- | .622** (9.69) | .108 |
| Constant | -2.247 (-19.10) | -- | -1.559 (-6.73) | -- | -2.411 (-18.52) | -- |
| Number of observations | 17,059 | | 4,698 | | 15,331 | |
| Mean dependent variable | .275 | | .268 | | .224 | |

- NOTES: (1) The number in parentheses beneath each coefficient is an asymptotic t-statistic.
 (2) ** Coefficient is statistically significant at the 1-percent level.
 (3) * Coefficient is statistically significant at the 5-percent level.

- a. The populations are recommended and eligible Marines in zone A who made decisions in FY 1989 and had initial contracts of four, five, or six years. The small number of observations with missing AFQT scores were omitted. The population used to estimate the probability of early reenlistment in the middle equation includes only reenlistments. The population used to estimate the probability of in-year reenlistment excludes those who were reenlisting early.
 b. Der. = derivative. Derivatives, calculated at the mean of the data, are reported only for statistically significant coefficient estimates.